

CE
46

The increasing mechanization of cotton production should mean a great deal to yarn spinning mills. Francis L. Gerdes discusses it on Pages 34, 36 and 39 of this issue.

Textile

bulletin

DECEMBER - 15 - 1945



ADVERTISING
INDEX—PAGE 49

HAVE YOU EVER CONSIDERED HOW MUCH WORRY IS COSTING YOU?

Employees worried over doctor bills, hospital bills, and the loss of income resulting from prolonged sickness, serious injury and death, just *can't* do their best work for you.

A Provident **HUMAN SECURITY PLAN** will minimize this *hidden* loss of productive power in your plant—by providing “Money When Needed Most” . . . at a cost within the reach of *all* your employees.



Every **HUMAN SECURITY** group insurance program is individually designed and may include:

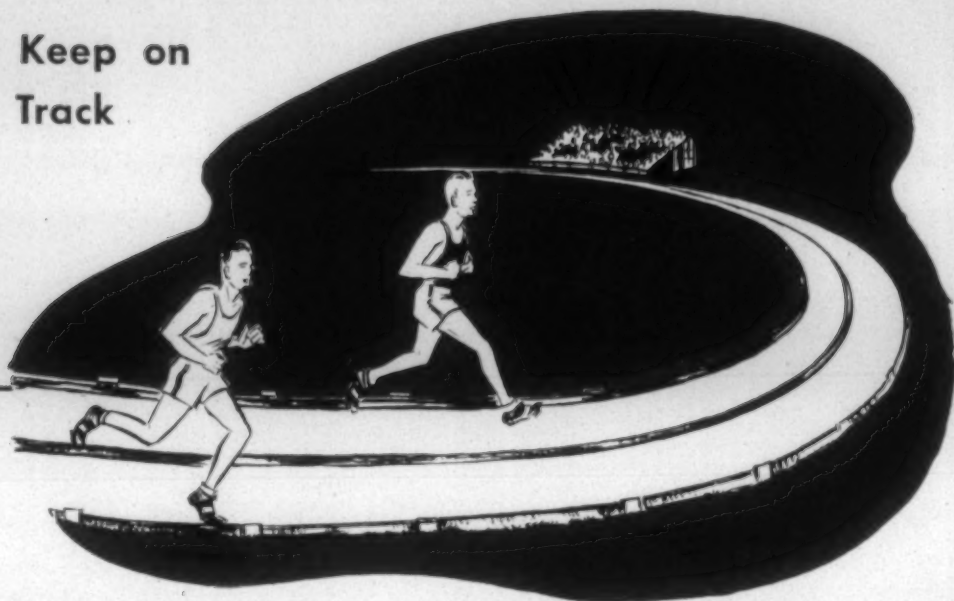
- Life Insurance
- Accident and Sickness Benefits
- Hospital Board and Room *
- Hospital Miscellaneous Expense *
- Surgical Fee Reimbursement *

*May be extended to members of the employee's family if desired.

PROVIDENT LIFE AND ACCIDENT INSURANCE COMPANY

Chattanooga 2 Since 1887 Tennessee

It Pays to Keep on
the Inside Track



A
New Method of Belt-Making Presented in
SPIN CRAFT for
SHORT CENTER DRIVES

It is a known fact that the inside track is shorter. This principle also applies to endless double belts, for the reason that the distance around the pulleys is longer on the outside of the belt than on the side contacting the pulleys. The differential in length between the inside and outside ply is proportionately greater on short centers than on long centers.

SPINCRAFT is the only endless leather belt prefabricated with a longer outer ply to compensate for this differential.

SPINCRAFT is made endless only, in light and medium weights, doubles up to 6" wide, to specified lengths. For short center spinning frame and other textile drives. SPINCRAFT is also "broken in" on a special apparatus before shipment. This assures immediate efficient operation without the usual break-in period. SPINCRAFT is made from the famous 3-STAR leather with its particular qualifications for textile work.

Further information about this new endless leather belt and its application to your short center drives will be gladly given.

CHARLOTTE
LEATHER BELTING COMPANY



CHARLOTTE, NORTH CAROLINA

ONYX

onyx

The
Season's
Greetings



ONYX OIL & CHEMICAL COMPANY

JERSEY CITY, N. J.

CHICAGO

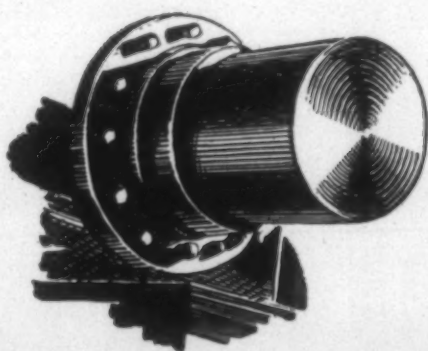
PROVIDENCE

CHARLOTTE

In Canada: Onyx Oil & Chemical Co., Ltd., Montreal, P. Q.; Toronto, Ont.

Today's Production Whirlwind

calls



Bearings run as cool as a
spring breeze after changing to

TYCOL GREEN CAST GREASES

There was a time when overheated bearings raised havoc with a large plant's production schedules. But now this trouble seems like a bad dream, so cool do bearings run, now that they are lubricated with Tycol Green Cast Greases.

Here is the reason for the excellent results this, and hundreds of other plants get when they change to Tycol. Tycol Green Cast Greases are made from the finest

cylinder oil combined with a *minimum* of soap — more lubricating oil, less soap, equals more economical lubrication. Tycol Green Cast Grease is water repellent . . . scientifically engineered to "take it" indoors and out.

Let us help you maintain maximum production by proper lubrication. Have a Tide Water Associated engineer give you full details.



TYCOL INDUSTRIAL
ENGINEERED FOR EVERY

for TYCOL

ENGINEERED LUBRICATION

Now more than ever before it is essential to use the best lubricants that can be obtained — for maximum production ... top efficiency ... lowest operating cost. That's why more and more operators are turning to Tycol scientifically engineered oils and greases.

Whatever your lubricating need — for mine car or tippie, textile loom or spindle, stationary Diesel or locomotive, steam engine or turbine ... for extreme pressure, high or low temperature, heavy duty, high speed, or any other service condition — there's a Tycol oil or grease exactly suited to your specific need.

In developing this comprehensive line, Tycol subjects each individual oil and grease to rigid tests during manufacture. This control assures the required lubrication characteristics for maximum performance of that particular product.

Let us prove Tycol Engineered Lubrication efficiency to you ... show you the extra value in every measure of Tycol oil and grease. Write your nearest Tide Water Associated office for the facts.

***SPECIFIC GRAVITY.** Clear, concise descriptions of the basic tests used to determine important lubrication properties — Carbon Residue, Pour Points, Specific Gravity and others — are given in Tide Water Associated "Lubricania". For your FREE copy write: Tide Water Associated Oil Company, 17 Battery Place, New York 4, N. Y.



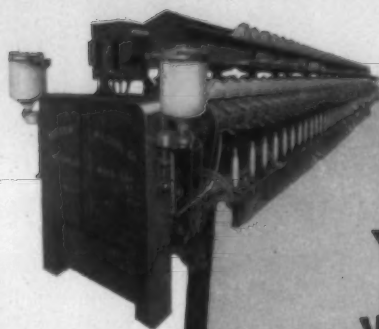
LUBRICANTS
SERVICE NEED



**TIDE WATER
ASSOCIATED
OIL COMPANY**

17 BATTERY PLACE • NEW YORK 4, N. Y.

PRINCIPAL OFFICES
BOSTON • PHILADELPHIA
PITTSBURGH • CHARLOTTE, N. C.



With the FOSTER MODEL 102, You Don't Have to Worry About WINDING SPUN RAYON

Many cotton, woolen and worsted mills are now running SPUN RAYON. Many more plan to after the war.

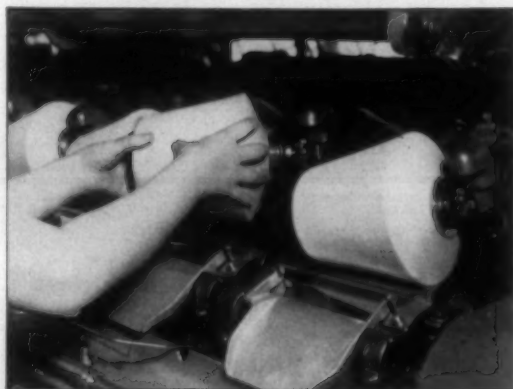
If your mill is one of them, you don't have to worry about winding. Use the Foster Model 102 and your problem is solved — from a quality, a flexibility and an economy standpoint.

1. This machine will wind all types of staple fibres.
2. Cutting or chafing of yarn is prevented by a micarta ball bearing idler shell on the end of the drum contacting the nose of the cone.
3. The machine will wind high twist or low twist yarns — bone dry or emulsion treated (emulsion attachment if desired).
4. It can be adjusted to wind any taper normally used, and any "lay" from 9° to 18° and traverses from 2½" to 7".
5. It will increase production 100%, compared with old models, and reduce labor cost by about ½, due to high winding speeds, self threading tensions, ease of doffing and empty bobbin conveyers which discharge directly into bobbin truck.
6. It can be equipped to wind knitting cones, warping cones, paper tubes or dye packages — one side tubes and the other side cones if desired.
7. The Foster Model 102 knitting cone has a convex base which prevents "nips" at the knitting machine.
8. Maintenance and repair costs are low. We use the right metal in the right place. For instance, all parts in contact with the yarn are of hardened steel. In one mill checked, annual repair costs average only about \$3.50 per 100 spindle machine and no specially trained fixers are required.

CIRCULAR A-91 ON REQUEST



Products of the Foster Model 102



Doffing. Package holder swings out



Empty-bobbin conveyor discharging into truck

FOSTER MACHINE CO., Westfield, Mass., U.S.A.

SOUTHERN OFFICE: Johnston Building, Charlotte, North Carolina • Canadian Representative: Ross Whitehead & Company, Limited, University Tower Building, 660 Ste. Catherine Street West, Montreal, Quebec

*When We Get
More Men*



You Will Get More Looms

We have Both Erecting Space and Equipment
for Much Greater Output

DRAPER CORPORATION

BARBER-COLMAN AUTOMATIC SPOOLER



THIS MACHINE IMPROVES THE QUALITY OF EVERY FOLLOWING STEP IN CLOTH PRODUCTION

The installation of Barber-Colman Automatic Spoolers will improve your mill operations in many ways. This machine produces a better cheese for the warper, resulting in fewer warper stops. The beam that goes to the slashers is more uniform throughout and will help to improve efficiency of operation in the slasher room. The loom beams are better, too, so there are fewer loom stops in the weave room, producing better cloth for the finishers. Thus Barber-Colman equipment can give you, not only better winding, but increased production and lower costs all down the line. Barber-Colman Automatic Spoolers have demonstrated, through years of steady service, that they give very little trouble, require few repairs and very few service calls, and deliver uniform packages day after day with a minimum of down time. *For details on how you can profit from use of this equipment, see your Barber-Colman representative.*

AUTOMATIC SPOOLERS • SUPER-SPEED WARPERS • WARP TYING MACHINES • DRAWING-IN MACHINES

BARBER-COLMAN COMPANY
ROCKFORD • ILLINOIS • U. S. A.

FRAMINGHAM, MASS., U. S. A.

GREENVILLE, S. C., U. S. A.

MANCHESTER, ENGLAND



First Quality in Combed Yarns



LIVELY SPINNA CALF

It's the Triple-Resilient Roll Covering

Mills whose reputations depend on quality insist that nothing takes the place of *leather* rolls for fine spinning . . . and no roller leather is as consistently high-quality as Lawrence's Spinna Calf . . . The "grain" side of calfskin has *natural* characteristics for drafting — unequalled by any other material. Spinna Calf has become, through the years, the most generally used calfskin. Results — in terms of yarn quality — must be the reason. *Specify* Lawrence Spinna Calf . . . A. C. Lawrence Leather Company, Peabody, Mass., manufacturers of Lawrence Calfskins—1st choice for aprons. Represented by H. H. Hersey, Greenville, S. C.



EVERY YEAR MORE PEOPLE DECIDE LEATHER IS BEST

A GREAT TEXTILE SELLING ORGANIZATION



BRANCH OFFICES

CHICAGO, ILL., . . . 1375 Merchandise Mart
BOSTON, MASS., 99 Chauncy St.
NEW ORLEANS, LA., . . . 201 Balter Bldg.
PHILADELPHIA, PA., . . 1336 Widener Bldg.
ATLANTA, GA., . . . 216-217 Walton Bldg.
ST. LOUIS, MO., 915 Olive Street
SAN FRANCISCO, CALIF., . . 833 Market St.

SELLING AGENTS

**ISELIN-JEFFERSON
COMPANY**

90 WORTH STREET, NEW YORK CITY

William Iselin & Co., Inc., Factors

igepon

first and foremost
synthetic detergent

- eliminates hard water problems
- shortens production time • cuts costs
- assures highest quality in fabrics

may we advise you how igepon can solve your mill problem

GENERAL DYESTUFF CORPORATION

435 HUDSON STREET, NEW YORK 14, NEW YORK

BOSTON • PHILADELPHIA • CHARLOTTE • PROVIDENCE • CHICAGO • SAN FRANCISCO

a CHEMICAL for COTTON



1
The
PRODUCT

VIRGINIA HYDROSULPHITE



VIRGINIA HYDROSULPHITE is a concentrated, white, stable, free-flowing, uniformly crystalline powder, readily soluble in water. 100 lbs. of water at 68° Fahr. will dissolve 21.8 lbs. $\text{Na}_2\text{S}_2\text{O}_4$.

DYEING WITH INDIGO AND VAT DYES: VIRGINIA HYDROSULPHITE has merit as a reducing agent in dyeing with indigo and vat dyes, because of its easy and complete solubility, and carefully controlled particle size. The addition of Virginia Hydrosulphite to dyeing machines in small increments is easily handled because dusting is reduced to a minimum.

DECOLORIZING DYED FABRICS: VIRGINIA HYDROSULPHITE is particularly efficient as a chemical reducing agent for the removal of dye-stuffs from fibres because of its easy and complete solubility, and its controlled particle size.

VIRGINIA HYDROSULPHITE IS advantageously used as a general bleaching agent of soap, sugars, oils, minerals, straw and various fibres. The stronger and more efficient the reducing action, the more complete is the bleaching effect.

SHIPPED in sealed packages, ICC specifications 21-A or 37-E.

Gross weight	269 lbs.
Net weight	250 lbs.
Outside diameter	17 1/4 in.
Outside height	25 in.

SHIPMENT will be made from West Norfolk, Va., in Carload or Less Carload lots; L. C. L. shipments from stocks at Boston, Chicago, New York, Philadelphia, Charlotte and Atlanta.

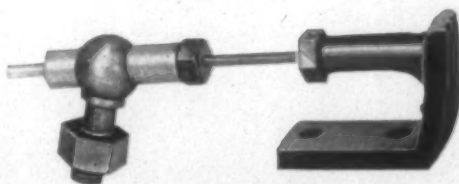


**VIRGINIA
SMELTING CO.**
WEST NORFOLK, VIRGINIA

Over 200 Mills

Have Installed the PIERCE BOBBIN LOCK MOTION

ON THOUSANDS OF LOOMS
DURING THE PAST SIX MONTHS



PATENT PENDING

Reducing your filling breaks on transfer
of Bobbins means:

INCREASED PRODUCTION
BETTER QUALITY

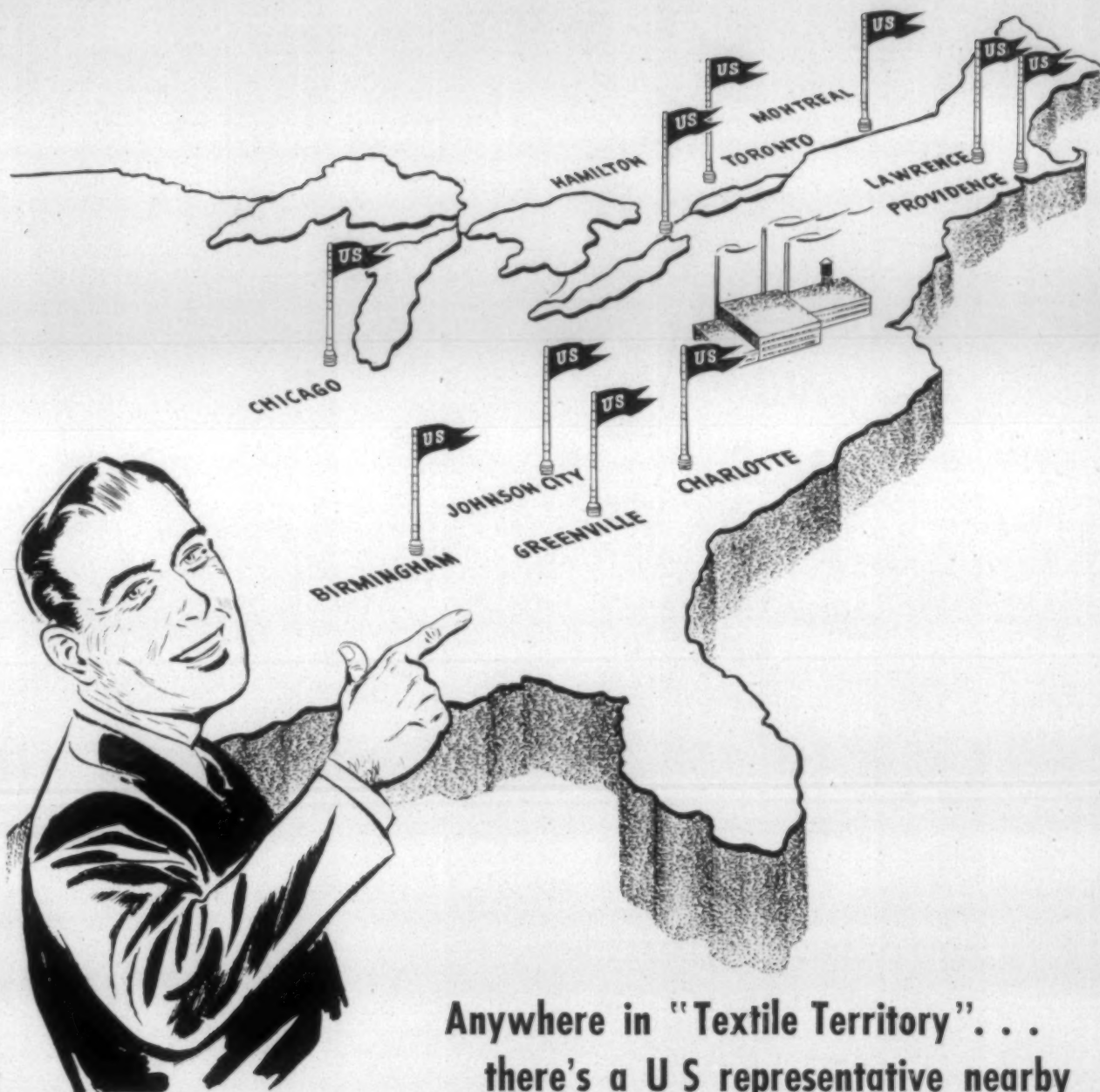
FOR PROOF try a section of looms with
Pierce Bobbin Lock Motion and record
your stoppage. It is simple, easy to install,
soon pays for itself in time and labor saved.

ACME MACHINE & TOOL CO.

CHARLOTTE, N. C.

2516 Wilkinson Boulevard Telephone 4-5633

Sole Manufacturers



Anywhere in "Textile Territory" . . . there's a U S representative nearby

Three More Reasons Why It Pays to Consult U S

AMPLE PLANT CAPACITY Five manufacturing plants, in North and South locations closely keyed to textile production areas, are fully equipped to handle any size orders.

PRECISION STANDARDS U S has cooperated with textile machinery manufacturers for 86 years - can meet the closest possible limits of tolerance in all tests for dimensions, weight, and balance.

CONTROLLED RAW MATERIAL Extensive U S owned timber properties, including fine northern hardwood stands allow close control of raw material selection and processing from the source.

Wherever your mill is located - North, South, or Canada - it's not far from the headquarters of some representative of the U S Bobbin and Shuttle Company.

Each one of these men is well-equipped to bring you U S service at its best. Each one knows every field of textile production from long association - and can offer experienced advice on the use of U S products in any process.

Tell a U S representative your requirements, and he'll help you select equipment exactly suited to your needs - equipment that will lower costs and improve performance - whether you need Bobbins, Cones, Rolls, Shuttles, or Spools.

U S BOBBIN & SHUTTLE CO.

PROVIDENCE, R. I.
GREENVILLE, S. C.

CHICAGO AGENT:
Albert R. Breen,
80 E. Jackson Blvd.

LAWRENCE, MASS.

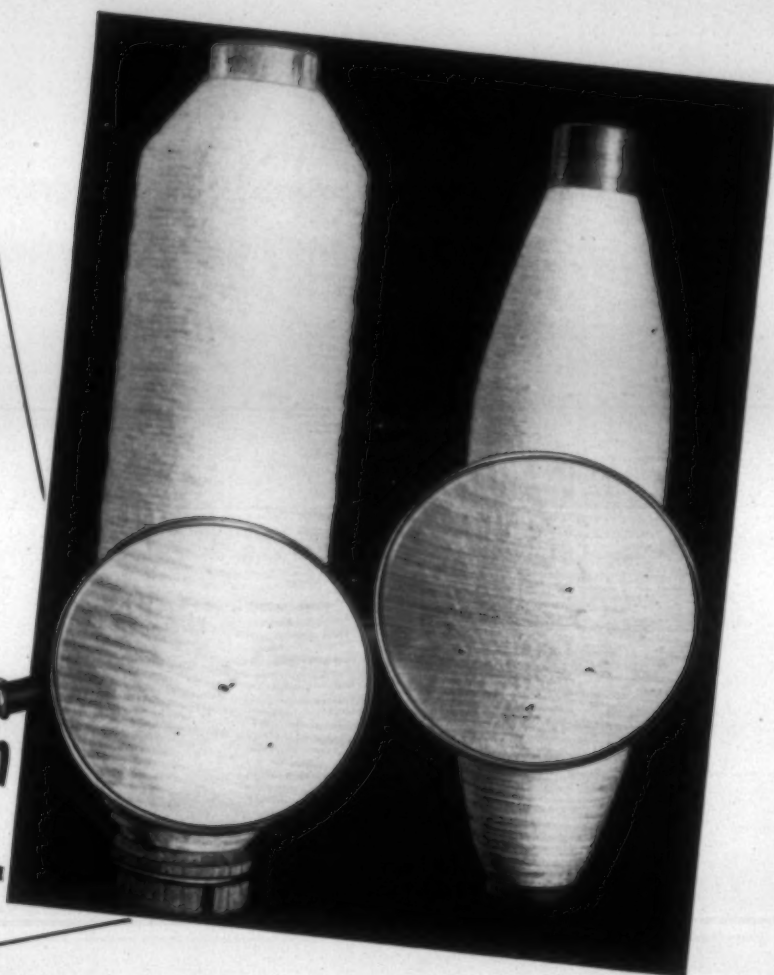
CANADIAN AGENT:
W. J. Westaway
Montreal, Que. - Hamilton, Ont.

JOHNSON CITY, TENN.
CHARLOTTE, N. C.

ALABAMA AGENT:
Young & Vann Supply Co.
Birmingham



**3 ways
to remove
impurities
before
they reach
this far...**



1 #11 DUST AND WASTE EXTRACTOR

2 CONTINUOUS STRIPPER

3 WASTE CONTROL SCREEN

The complete elimination of every single impurity in a finished yarn package is an achievement to be desired. But many of the impurities which do get through can be eliminated if proper steps are taken at certain strategic points.

The Saco-Lowell #11 Dust and Waste Extractor is the first point of attack against these minute particles. Here the great bulk of fine peppery leaf and dirt is removed. The next point of attack is at the card. Here, by using a "combat team" composed of the Continuous Stripper and the Waste Control Screen, it is possible to keep the cylinder wire in such an active condition that there is a definite reduction in the amount of nep, leaf and other impurities in the web.

As a means of estimating the amount of impurities that are now "getting by" we suggest you make a nep and leaf count on ten square inches of cloth. Should you find this count too high our engineers may be able to make some helpful recommendations.

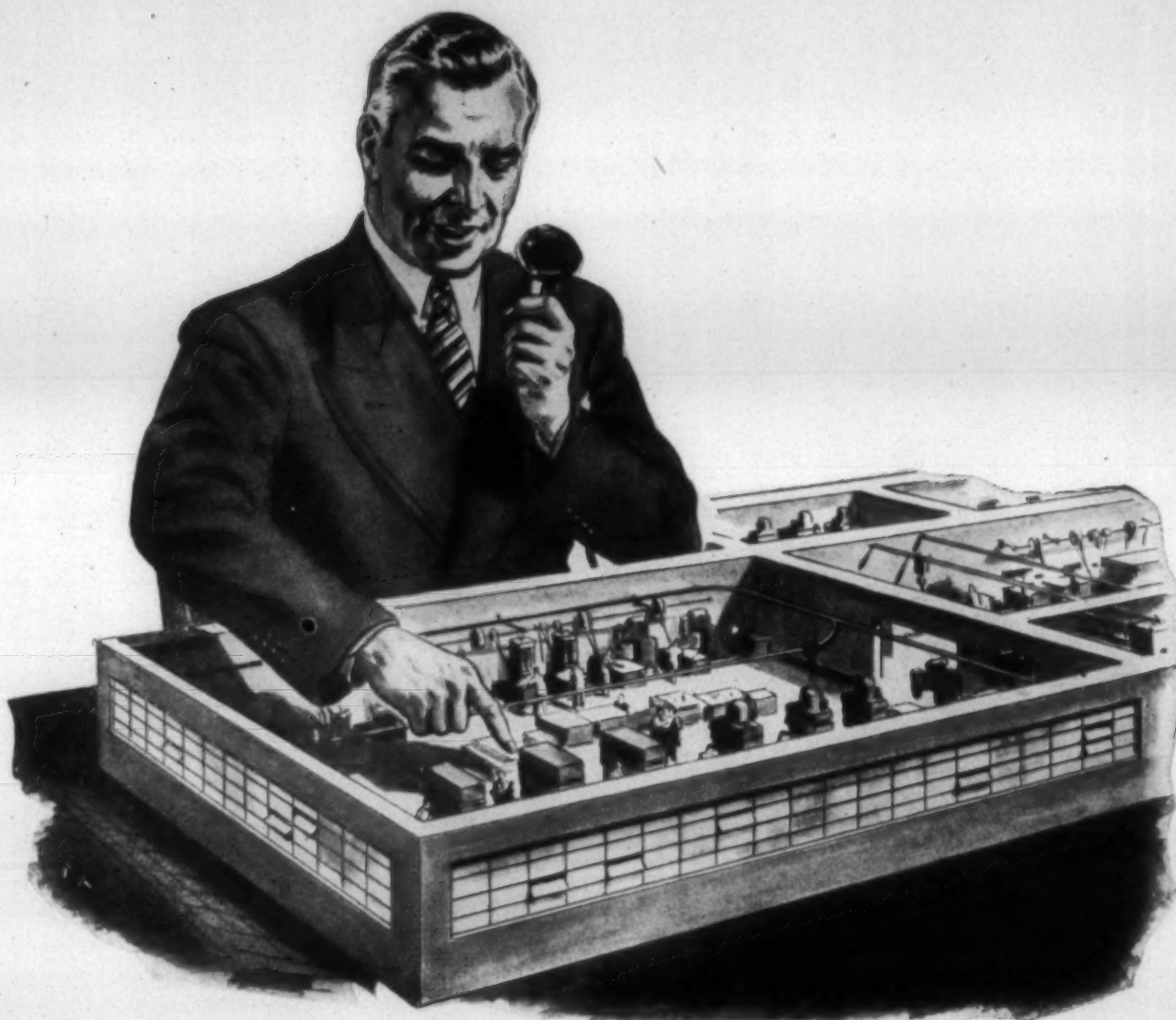
Saco-Lowell Shops

BOSTON, MASSACHUSETTS

Charlotte

Greenville

Atlanta



You can locate any man in the plant instantly!

SUPPOSE you want to summon a foreman—or the plant superintendent—or the equipment engineer—or the company doctor—from “somewhere around the plant.” What do you do?

It's simple!

That is, it really *is* simple if your plant is equipped with an RCA Sound System. Otherwise, you may have to phone, send a messenger, or wait. And if it's a matter that can't wait, it's too bad.

But that isn't all you can do. Broadcasting music with RCA Sound Equipment in your own shops and work-rooms lessens worker fatigue—boosts employee morale. And for broadcasting announcements, emergency alarms,

and “live,” recorded, or radio programs, it has no equal.

Bear in mind that an RCA Sound System can be tailored to your needs without extra expense, no matter what the needs of your plant may be.

For complete information—A new booklet, “RCA Sound Systems,” will be sent to you, without obligation. Write to your RCA distributor, whose address appears below. Inquiries from states other than those listed should be directed to: Dept. 68-6, Radio Corporation of America, 530 Citizens and Southern Bank Building, Atlanta, Ga.

RCA SOUND SYSTEMS

68-6134-4



SOUTHERN RADIO CORPORATION
1201 West Morehead St., Charlotte, North Car.
distributor for North and South Carolina

THE YANCEY COMPANY, INC.
340 W. Peachtree Street, N. W., Atlanta 3, Ga.
distributor for Georgia, Alabama, & Tennessee

Bahnson

AIR CONDITIONING SYSTEMS

Meet EVERY Textile Need



Thirty years of research and development work in textile air conditioning have equipped Bahnson with a practical and economical solution to any textile air conditioning problem.

WE MANUFACTURE OR CAN SUPPLY—

HUMIDIFYING
REFRIGERATIVE COOLING
EVAPORATIVE COOLING
HEATING
AIR FILTERING
DEHUMIDIFYING
AIR CLEANING
VENTILATION

In any combination with automatic controls



We believe our pneumatic Atomizer, Centrifugal Humidifier, Humiduct System, dry duct ventilation with Centrifugal Humidifiers or Atomizers, unit central stations, and large central stations, for saturated air are without peer. We furnish and install these systems with any type of air filtering devices, dehumidifying by chemical means or heat, heating systems, refrigeration systems, or evaporative cooling systems.

BAHNSON ENGINEERS KNOW

TEXTILE AIR CONDITIONING

Bahnson System

AIR CONDITIONING

ENGINEERS

THE BAHNSON CO.

WINSTON-SALEM, N. C.

886 DREWRY ST.
ATLANTA, GA.

93 WORTH ST.
NEW YORK CITY

553 S. FIGUEROA ST.
LOS ANGELES 13, CAL.

703 EMBREE CRESCENT
WESTFIELD, N. J.

W. J. WESTAWAY CO., LTD.
HAMILTON, ONTARIO

Faith... faith in the future... faith in men of good will
...eternally, these are the essence of the Christmas Season.
As we pause to express Greetings to our friends in all those
industries we serve, we renew our pledge of unstinted
cooperation for the year ahead.

NATIONAL ANILINE DIVISION • ALLIED CHEMICAL & DYE CORPORATION



Y
a
P
h
n
i
M
d
S
i

TEX



HOME for them!

**and the
HOME STRETCH
for YOU!**

You still have time! In December, your employees' allotments to the Victory Loan through your company's Payroll Savings Plan offer a final chance to help speed the proud homecoming of our fighting men—and do all in medical power for our hospitalized heroes!

Make December a plantwide TOP-THE-QUOTA drive! Now's the time to spotlight your Payroll Savings Plan—and "brief" your Bond-selling organization for fast, last minute action!

**Resolicit every employee to buy
the New F.D.R. Memorial \$200 Bond**

The new Franklin Delano Roosevelt \$200 Bond—better than actual cash because it earns interest—is a strong building stone toward the secure future of every employee-purchaser!

From now 'til the New Year—with plant rallies, interdepartmental contests and resolicitation—keep Payroll Savings Plan Bond-buying at a new Victory Loan high! Buying a Victory Bond is the best way of saying "Welcome Home" to our returning veterans! Also an active aid in assuring prosperity to your nation, your employees—and your own industry!

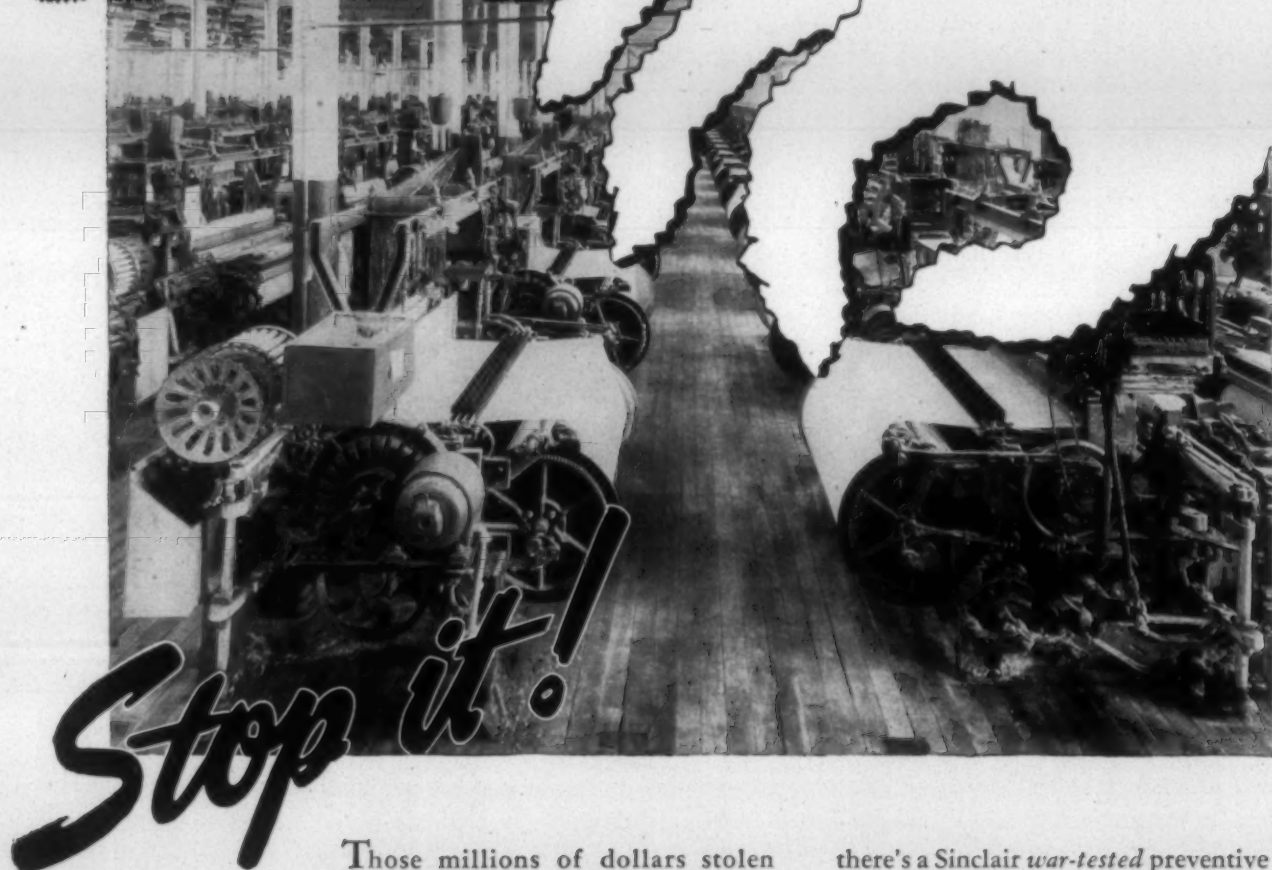


The Treasury Department acknowledges with appreciation the publication of this message by

TEXTILE BULLETIN

This is an official U.S. Treasury advertisement prepared under the auspices of the Treasury Department and War Advertising Council

RUST STEALS MONEY



Those millions of dollars stolen annually by rust's scaly fingers . . . why let them be your dollars? Stop the rust thief in your plant!

Sinclair preventives that helped solve the war's tremendous rust problems are available to end *your* rust troubles. Whether it be protection for

- machinery in regular operation,
- machinery in short-time or extended storage,
- machinery in transit,
- piping, shafting, etc., exposed to corrosion,

there's a Sinclair *war-tested* preventive that *stops* rust . . . extends equipment durability . . . lengthens the life of metal installations.

Sinclair rust preventives are easily applied, easily removed — and they protect both internal and external surfaces.

Write us for information about application of Sinclair Opaline® RP Oils, and Sinclair Rust-O-Lene® rust preventives to your problems.

*Reg. U. S. Pat. Off.

SINCLAIR TEXTILE LUBRICANTS

FOR FULL INFORMATION OR LUBRICATION COUNSEL WRITE SINCLAIR REFINING COMPANY, 630 FIFTH AVENUE, NEW YORK 20, N. Y.



B. M. Bowen Elected President of Southern Textile Association at Annual Convention

APPROXIMATELY 250 textile plant operating executives of allied trades attended the annual convention of the Southern Textile Association held at Charlotte Dec. 8 in the Hotel Charlotte. B. M. Bowen, superintendent of Salisbury (N. C.) Cotton Mill, was elected president to succeed M. Weldon Rogers of St. Louis, Mo. John M. Caughman, superintendent of Spartan Mills at Spartanburg, S. C., replaced Mr. Bowen as vice-president of the association, and Virgil E. McDowell, assistant superintendent of Rosemary Mfg. Co. at Roanoke Rapids, N. C., was named chairman of the group's board of governors. Marshall Dilling of Gastonia, N. C., was re-elected executive secretary.

Six new directors were elected (the first four listed for three-year terms ending in 1948, the last two for two-year terms ending in 1947): Harry Shealy of Pacific Mills, Columbia, S. C.; W. G. Huguley, Jr., of Seminole Mills, Clearwater, S. C.; J. Y. Jones of the Kendall Co., Newberry, S. C.; J. V. Randall of Cartex Mills, Salisbury, N. C.; Earl Crenshaw of American Thread Co., Clover, S. C.; and R. E. Henderson of Riverside & Dan River Cotton Mills Co., Danville, Va.

Main speakers at the morning session were Mr. Rogers, Dr. Hugh M. Brown, dean of the school of textiles at Clemson College, Clemson, S. C., and Herman A. Dickert, director of the A. French Textile School, Georgia School of Technology, Atlanta, Ga. Their remarks are published in this issue. The retiring association president reviewed the group's past work and expressed hope that its activities might be enlarged in scope during coming years. Dr. Brown and Dean Dickert, both of whom are recent appointees to their respective positions, told of plans that their institutions expect to effect in textile education and research. The morning meeting ended with an open forum discussion of association policies in respect to services the organization does and can render to textile plants in the South.

Mr. Rogers again presided at the luncheon session, a feature of which was an address by Wm. M. McLaurine, former secretary and treasurer of the American Cotton Manufacturers Association. Mr. Bowen took over his duties as president when the newly-elected officers were presented, then called on J. O. Corn, vice-president and general manager of Caro-Lin-Inan Mills at High Shoals, N. C., to present the S. T. A. Past President's Medal to Mr. Rogers.

Prior to the convention the S. T. A. Associate Members Division met and re-elected its chairman, John C. Turner

of Atlanta, Ga. Also continued in office were Falls L. Thomason of Charlotte, first vice-chairman, and Claude Iler of Greenville, S. C., second vice-chairman.

Role of the Southern Textile Association in the Industry

By M. WELDON ROGERS, President

DURING these last four years all of us have been quite busy with the job at hand, doing our share in textiles' part of winning the war. Persons in position to know praise the textile industry for the fine job that was done, and you men are the ones who are largely responsible for the success of your organization in the over-all picture.

Suppose we consider the place the Southern Textile Association should have in these months ahead. At this time, with the acute shortage of almost every type of textile product, there is no wonder that we continue to hear from our superiors "more production." This is no unfamiliar request, and we should and will continue to strive for each extra pound or yard. Just how long it will require the mills to meet the demand is not known. One day we shall find the word "allotment" to mean the time it requires a selling house or broker to sell our production, rather than the small yardage they now divide to their various customers.

When that time comes, the demand for good management will be even more important than today. No doubt new processes will be introduced, new raw materials, new machinery and new ideas. Our sectional meetings, which are normally held in the spring and in the fall, will provide opportunities for us in the Southern Textile Association to keep abreast of the times. Here we can meet our friends; and, if these meetings achieve their aim, worthwhile discussions will take place. Ideas and methods can be exchanged, new raw materials can be explained and discussed, new machinery described, and our time and effort spent in attending these meetings will be very worth while.

The company or management which closes its eyes and ears to these new methods of operations and coming developments will be lost. Those of us with old machinery, high

operating costs, inefficient labor—and unsound labor relations—will not survive the days after the present shortages of textiles is satisfied. There has been a trend toward the vertical system of operation, and this method of operation will cause undue hardship for some companies. All in all, we still have problems facing us in the future that will either make life miserable or will afford a challenge to us and the younger men entering the textile industry.

The demands on management will necessitate very capable overseers, superintendents and managers. This field will attract more and more highly-trained textile graduates, and many of the methods of the old-time "boss man" will no longer have a place in this new picture. The Southern Textile Association will provide an excellent melting pot for the fusing of the ideas and methods of the older and more experienced men with those of the new, highly trained specialists. This latter group might well, in spite of its learning, study the methods used by the old timers, in order that the success of the new order be assured.

Much progress has been made in the educating and training of the replacements for the present management. North Carolina State College, Clemson and Georgia Tech have improved their textile schools by the various foundations begun in recent years. Better trained textile graduates should result; and, no doubt, our textile schools will enroll a record number of men each year. This field is and will continue to be attractive to young men when they choose their vocation and seek their education and preparation for their life's work. This group will be more research-minded, more receptive to new ideas, unbiased in their thinking—all of which means that we, the older heads in management, must accept the new methods or find that we are out of step with the trend.

The future success of this association will depend upon the co-operation given it by the operating heads of our textile industry. I fear we have not had their whole-hearted co-operation in the past, but I believe that this feeling will change. Our mill owners are becoming more aware of the fact that the success of their investment has been largely due to the type of management which has been entrusted with the responsibility of dealing with labor, production costs and the thousand and one headaches you men have endured so well in the past.

It is my hope that more recognition will be given our organization, from the standpoints both of interest and of financial support for a bigger and better association.

The Textile School in the Industry Today

By DR. HUGH M. BROWN, Dean
School of Textiles, Clemson College



I HAVE taken for my topic the textile school in the industry today and am very glad to make a few remarks that I hope will be pertinent to our common problems in this post-war period. I wish to state what I believe are important aims for the Southern textile schools. I hope there will be a fine, close co-operation among the several textile schools and especially among those of our Southland. Only with a really concerted effort can our schools do well the tremend-

ous job that is to be theirs in this decade. Only by all pulling together can these institutions bring to the textile industry the great return it has a right to expect. Likewise, there should be a whole-hearted co-operation between the schools and all the organizations making up this vast textile industry, and also among the varied interests which are producing the hordes of products for the textile industry—producing the several natural fibers and the synthetic ever-increasing in number; producing textile fabrics and textile machinery and the new cotton farming machinery; and a host of others producing chemicals, conditioners, dyes, sizes, soaps, etc. Probably the largest single interest is labor, employed throughout these numerous enterprises of the textile industry. Just consider what a large proportion of our country and our population has, through factory or farm, a momentous stake in this textile business.

For all these interests to co-operate and co-ordinate their programs does not mean that there shall not be competition among them. Competition makes for progress, and competition is the American way. The schools and every part of the industry should work together because they have a common goal; namely, a healthy, growing textile industry for this nation which can weather competition from any quarter. By co-ordinating our efforts we can achieve this end.

You hear of the "Battle of the Fibers." I wonder if it should not be the "Wedding of the Fibers," often in the same strand of yarn or in the same piece of cloth, and in the finding for each fiber its proper use to bring about the greatest promotion for the whole industry.

Capital and labor, though sometimes seeming at cross purposes, both desire and must have this growth in the industry. They must find ways and, by far and large, are finding methods to arrive at solutions of their differences. Textile expansion, for which we all hope, is not going just happen. It will take the utmost effort, study and wisdom from every angle. Due to the war and the scarcity caused by the war, we shall have a little time in which to get set and come to grips with the world-wide competition which is certainly approaching. We must not let prosperity in the immediate future make us feel too secure.

This is the setting in which the textile schools must do their part, and that part will be different and greater than ever before. The industries have come to the schools with liberal funds, asking many questions and hoping for some answers. They are not asking the colleges for graduates trained only for operating textile machinery, since they get these from the vocational schools and from their own schools. They are wanting graduates having some foundation in textiles and a background in science, economics and sociology, who with post-graduate study or with experience, or with both, will attain the vision and the ability to cope with the various new phases of management and promotion of industry today. These graduates will need the finest possible training to fill positions of leadership in research, development, manufacturing, marketing, etc., in all branches of the industry. To meet this problem, Clemson is in the process of organizing a new course in textile engineering and reorganizing its present courses in textile manufacturing and textile chemistry. This new engineering course will stress the fundamentals of mathematics, physics, chemistry, efficiency studies and engineering. It is expected that many of the graduates will go on for post-graduate work and become worthy of the best positions the field has to offer.

Next, what shall the schools do about this thing called

"CAREFULLY
INSPECTED"



... that's *Tufferized* Card Clothing



TUFFER
CARD CLOTHING

Careful as it might be, no "before-school" inspection by mother could ever match the thorough work of Tuffer inspectors. Every day Tuffer inspectors make certain that 50 million points of card clothing wire are uniform and ready to give you efficient, unvarying carding!

From foundation to the final inspection, master craftsmen are responsible for the making of Tuffer Card Clothing!

Card Clothing for Woolen, Worsted, Cotton, Asbestos, and Silk Cards—Napper Clothing, Brush Clothing, Strickles, Emery Fillets Top Flats Recovered and extra sets loaned at all plants—Lickerins and Garnett Cylinders from 4 to 30 inches and Metallic Card Breasts Rewired at Southern Plant—Midgley Patented Hand Stripping Cards, Howard's Special Hand Stripping Cards and Inserted-Eye and Regular Wire Heddles.

HOWARD BROS. MFG. CO.

WORCESTER, MASSACHUSETTS

Southern Plants: Atlanta, Ga., Gastonia, N. C. Branch Offices: Philadelphia, Austin Canadian Agents: Colwool Accessories, Ltd., Toronto 2

research? The textile industry, following the trend in other fields, is increasing the amount it "farms back" into research. The percentage is still relatively low, but it is on the increase. We no longer use fibers simply as they come but "doctor" them in various way to give them peculiar properties for new uses. We have chemical compounds to make water so wet that it will *not* run off a duck's back and others that will make water run off a raincoat or a lady's stocking like water from a duck's back. We make wool that won't shrink and cotton that won't stretch.

What are textiles? You must not answer carelessly, for almost anything might be a textile material, from glass to peanut hulls to something else, week by week. This is what science is doing to the industry. Along with the nation itself, the industry will have to lean more and more heavily upon science and research. This will make for frequent change, for new concepts, new machines, and many new measurements, adding to the complexity of the whole field just to keep pace with the ever-changing products demanded by the consumer. To give an illustration of this coming complexity, you see the use of electrotonics in textile manufacturing increasing by leaps and bounds.

Consider, also, the new textile research extending from your familiar yarn tests to the use of oscilloscopes, high-speed photography, X-rays and the electron microscope. You ask, why is all this research and complexity necessary? The answer is that those who are using research find that it pays; and, since this is true, others must follow or lose out. For some nations it will pay, and the other nations will have to do research or fall behind. They day is almost here when only the scientifically alert will have the markets. At long last the textile industry is on the move, and we must step lively to keep up. To the smaller concerns this situation would be alarming indeed were it not for the fact that in this country so much research is co-operatively supported or subsidized completely. Too much praise cannot be given the excellent work done by the several research institutes supported by groups of manufacturers, thus keeping each company's cost to a minimum. The individual member may have his own projects worked out confidentially by a large laboratory supported by the group. This is not to disparage the work carried on by large company laboratories. Even they are sharing much with the whole industry.

The extensive research carried on by the government and some by the schools, benefits the industry as a whole. In this connection, the government, in co-operation with your schools, is sending survey teams to conquered nations to study the latest methods there and bring back to you every possible new process, in order that the industry in America may not lag or falter.

This great increase in the material that a progressive textile man must learn creates a real task for the colleges. Some textile background must be given, but a graduate should have also at least an introduction to this scientific side of the industry. From the undergraduates will come the men that will go on to graduate schools and research institutions, to supply the industry's demand for adequately trained personnel. It is fortunate, possibly, that part of this personnel—physicists, chemists and engineers—will be furnished by universities and schools outside the textile field. At present the nation's supply of such men is low, and all industries are clamoring for them. Clemson is preparing to give her students background training in research tech-

niques and testing methods and in the near future to start a considerable amount of research, which will be mostly of the applied type.

Lastly, in addition to training students and promoting research, I think that the textile schools should render a valuable service directly to you people in the industry. In South Carolina we are arranging for this sort of extension service to the manufacturers of the state. We wish to know their problems; and in many ways, we believe, we can help them to help themselves. We think the school can do much toward evaluating the new research for the mills and in assisting them with their own. At least, we will keep in touch with the men of the industry. We want to know our manufacturers and their problems and want them to visit us at Clemson and help us with our problems.

If the textile schools and the industry get shoulder to shoulder, I, for one, believe we can win for this country an enviable position in the textile world and for textiles a strong position among the industries of this nation.

Fiber Developments in School and Factory

By HERMAN A. DICKERT, Dean
A. French Textile School
Georgia School of Technology



It has been stated that man has practiced the art of wearing some type of clothing for approximately 25,000 years and has been trying to build up the science of textiles for about 5,000 years.

Up to 1664 no one apparently dreamed of or considered anything for textiles except the so-called "natural fibers." It was not until a little more than 200 years later, in 1899, that Count Hilaire de Chardonnet exhibited the first *practical* synthetic yarn at the Paris Exhibition. This was of the nitro-cellulose type.

It was about 1910 before the manufacture of synthetic yarn fibers was established definitely in this country; and, while several different processes of manufacture were represented, all came from one common base—cellulose—obtained from wood pulp or cotton linters. In the beginning only the "bright" yarns were manufactured, but later delusterants of various types were added to control the luster to any required degree.

At that time the rayon producers had their headaches, along with the textile manufacturer and the ultimate consumer. Yarn quality was poor. Dyeing was bad; and the yarn was weak, particularly when wet.

At this time the producers were trying to "imitate" silk, and the only type of textiles produced was hosiery and circular-knit fabrics. This probably was due to the fact that those mills were accustomed to handling silk and had machinery for that purpose. Only continuous filament rayon was used at this time.

Due to the large potential market in woven goods, the rayon producers naturally wanted to get rayon into this field. Even though the first efforts were with silk weavers, it was pretty much of a flop. It was found that the rayon was much more sensitive to handling than silk, because of its inherent physical properties. After considerable research on the part of the rayon producers, and adjustments and im-

THIS IS NO. 54 OF A SERIES ON

GETTING THE MOST FROM WINDING

Information about winding designed to show improvements in winding equipment and new ideas in the winding operation



BREAKAGE LEVER BALANCE (No. 50 Machine)

It is sometimes necessary — particularly when winding light or fragile yarns which require a minimum tension — to obtain a very delicate and positive action on the Stopping Lever.

The Breakage Lever Balance (50-2934) accomplishes this purpose by accurately and sensitively balancing the Breakage Lever Assembly in a running position, eliminating any oscillation which might release tension and cause the spindle to stop.

The Stopping Lever Assembly can be so counter-weighted that its weight does not appreciably impose any load or increase the tension even on the finest deniers. When the end breaks, the Balance moves in the direction that will insure proper contact of the Stopping Lever with the Stopping Wheel, causing the Spindle to stop.

The Balance is an arc-shaped flat metal piece at the upper end of which a weight is fixed. It is attached directly to the Stopping Lever Hub by two screws. A radial slot permits a range of adjustment.

Two styles are made. One, having a single slot, is used with Stopping Lever Hubs in which there is one hole for the Breakage Lever. The other has two slots and is used with the Hub that has two holes for two different positions of the Breakage Lever.

PREVENTING SCRAMBLED YARN (Roto-Coner*)

Scrambled yarn on the face of a cone or tube can generally be attributed to insufficient frictional contact between the cone and the Rotary Traverse.

The Spindle Holder Bearing may be set so tightly that the package drops too slowly and does not make an immediate firm contact with the Traverse. The Bearing should be adjusted to a point where the package will drop freely and begin to turn immediately on contact.

The operator can make sure winding is started correctly by observing the practice illustrated here. Pass the yarn through the Tension with the right hand, the hand continuing to the package and picking up the end on the package. Bring up the left hand with the Knotter, tie the yarn, give the package a start with the left hand and support the yarn with the right hand just clear of the traverse as the left hand drops to the Starting Handle, releasing the yarn as the package starts to revolve. The yarn will pass into a groove and be carried the full length of the Traverse without scrambling or short-traversing.

Waste yarn wrapped around the spindle will, of course, prevent the spindle from turning freely, and

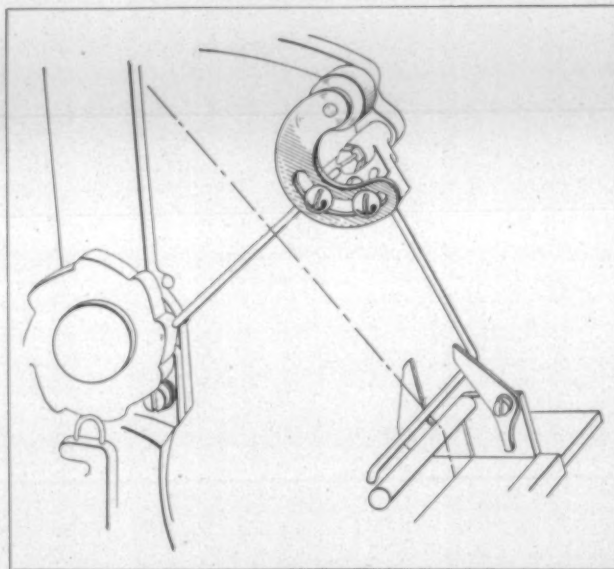


Fig. 1

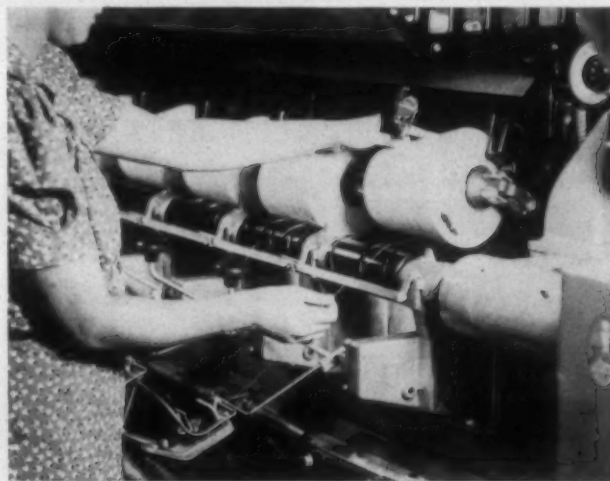


Fig. 2

may invite scrambled yarn. Guards are provided to reduce this hazard, but it is always well to be sure that no such condition exists. Inspecting the spindles for wrapped yarn takes very little time and will help increase production and quality.

*Reg. U. S. Pat. Off.

"THERE'S A UNIVERSAL WINDER FOR EVERY TEXTILE NEED"

See our Catalog in TEXTILE WORLD YEARBOOK
23.5.12

UNIVERSAL



WINDING

COMPANY

PROVIDENCE

BOSTON

PHILADELPHIA

UTICA

CHARLOTTE

ATLANTA

positions of responsibility in the industry. With this back-improvements to the silk processing equipment, considerable success was obtained. Efforts were then made to weave continuous filament rayon on cotton looms, and most of you are familiar with the difficulties encountered at that time.

The next step was spun rayon, which could be processed on cotton equipment. While a large number of details and refinements had to be worked out through the co-operation of the rayon producers and the mills, we now have products that can be handled in an efficient manner. In spite of the early troubles, extremely rapid strides have been made through unrelenting research by the rayon producers and through improved equipment by the machine manufacturers and improved technique by the textile manufacturers.

The important point in this program is *research, basic research* on the part of the producers and *applied research* conducted by the mills. The combination of these forces has placed synthetic yarns in their present position.

Throughout the period just described, all of the rayons worked with were from one common base—namely, cellulose. The viscose process accounted for the greater portion, with the cellulose-acetate fibers coming in for a share. The cupra-ammonium yarns (still a cellulose base) have been used extensively in certain fabrics. The old nitro-cellulose yarns faded out of the United States picture some time ago.

While searching for means of improving existing yarns, the chemist was not satisfied that he had the best product to begin with, in the cellulose-base rayons. It had been clearly demonstrated that, while these yarns did an excellent job in some instances, they were only fair for others and entirely unsuitable for some uses. Dry strengths were fair, and wet strengths were poor. In some instances elasticity was very desirable but not present to a sufficient extent in existing yarns. In other words, the cellulose-base rayons were far from being "universal" yarns.

Out of the research to develop yarns to meet specific needs has come a number that show promise. The first of these was nylon, a high-polymer product. A number of others have been reported as being in experimental stages of production. I am quite certain there are other developments still in the laboratory stage which show considerable promise but have not yet reached the production stage.

Strength appears to be one of the major goals, particularly an increase of wet strength. This improvement has been achieved to a large extent in some of the new fibers, but it still is a goal in the viscose type fibers.

While casein and certain others fibers have been used to some extent as wool substitutes, none of these fill the bill completely, and work is continuing in that direction. Among other things in the spun rayons, increased strengths, along with the resiliency, natural and permanent curl, as well as the natural wool handle, are being sought after in the staple fibers. Some progress has been made, but the goal has not been reached.

War uses have shown that synthetics can compete in a number of items normally made from natural fibers, and in a number of instances the synthetics have done a much better job. The new fibers have properties quite different from those which have been associated in the past with rayons. Now, instead of thinking of synthetic yarns as "substitutes," we are finding more and more that they may be entirely capable of doing a better job than was done originally by natural fibers.

Because of the improved properties, considerable work is

being done to determine the place of synthetics in industrial fabrics, a field in which the natural fibers have ruled supreme for a long, long time. The synthetics already have made inroads into the clothing field; and new developments in fibers, along with the development of new blends of synthetic and natural fibers which may be used in conjunction with new yarn and fabric finishes, no doubt will lead to greater inroads into the fields normally occupied by natural fibers.

While there is still considerable controversy over the merits of rayon versus cotton for use as tire cords, the fact remains that rayon has done and is doing an excellent job in tires. I feel that there is no doubt that rayon will continue to be used in this field, in which nothing but cotton was used for so long. Research is the answer to the phenomenal development of rayon. We, as cotton-producing states, have been asleep at the switch. What about cotton and other natural fibers?

While some research has been going on in these fields, the amount done has been comparatively small as compared with the amount of *intense* research which has gone into the development of rayon. It has been only within the past few years that serious thought has been given to research designed to develop cotton and other fibers so as to do an improved job of fabricating. While there are certain uses in which we believe that cotton and other natural fibers may always be superior, we certainly cannot afford to let the matter drop there. Based on the history of the progress of synthetics over the last few years, it is not possible to predict where they will stop. We must determine through research what we can do with our cotton and other natural fibers.

If we can do the intensive job of basic and applied research on cotton, such as has been done on synthetics, I am convinced we shall find improvements in current fields and, possibly, new uses we have not dreamed of. This research must involve close co-operation between your textile schools, research institutes, textile manufacturers and machinery manufacturers. All of this work must point towards producing a final product of greatly improved quality at higher operating efficiency at a lower cost. This approach probably will have to be made through chemical and physical research, machinery research, and improved manufacturing technique. There probably are many other approaches, but these appear to be most important at this time.

Textile School Plans At Georgia Tech

Because I have made such a sudden change from the industrial to the academic side of textile work, my ideas of teaching in a textile school may or may not fit in with those of more experienced educators. We have one main purpose at Georgia Tech—that is to give a thorough training in textiles and related subjects, in order to turn out men entirely capable of taking a place of leadership in the textile industry.

You are familiar with the fact that the manufacturers of Georgia have created a Textile Education Foundation to which almost 100 per cent of the manufacturers have contributed a total of more than \$500,000. The foundation is a non-profit organization established for the purpose of making possible the development of textile education in order to insure to the textile industry of the South a supply of better trained graduates who (Continued on Page 64)



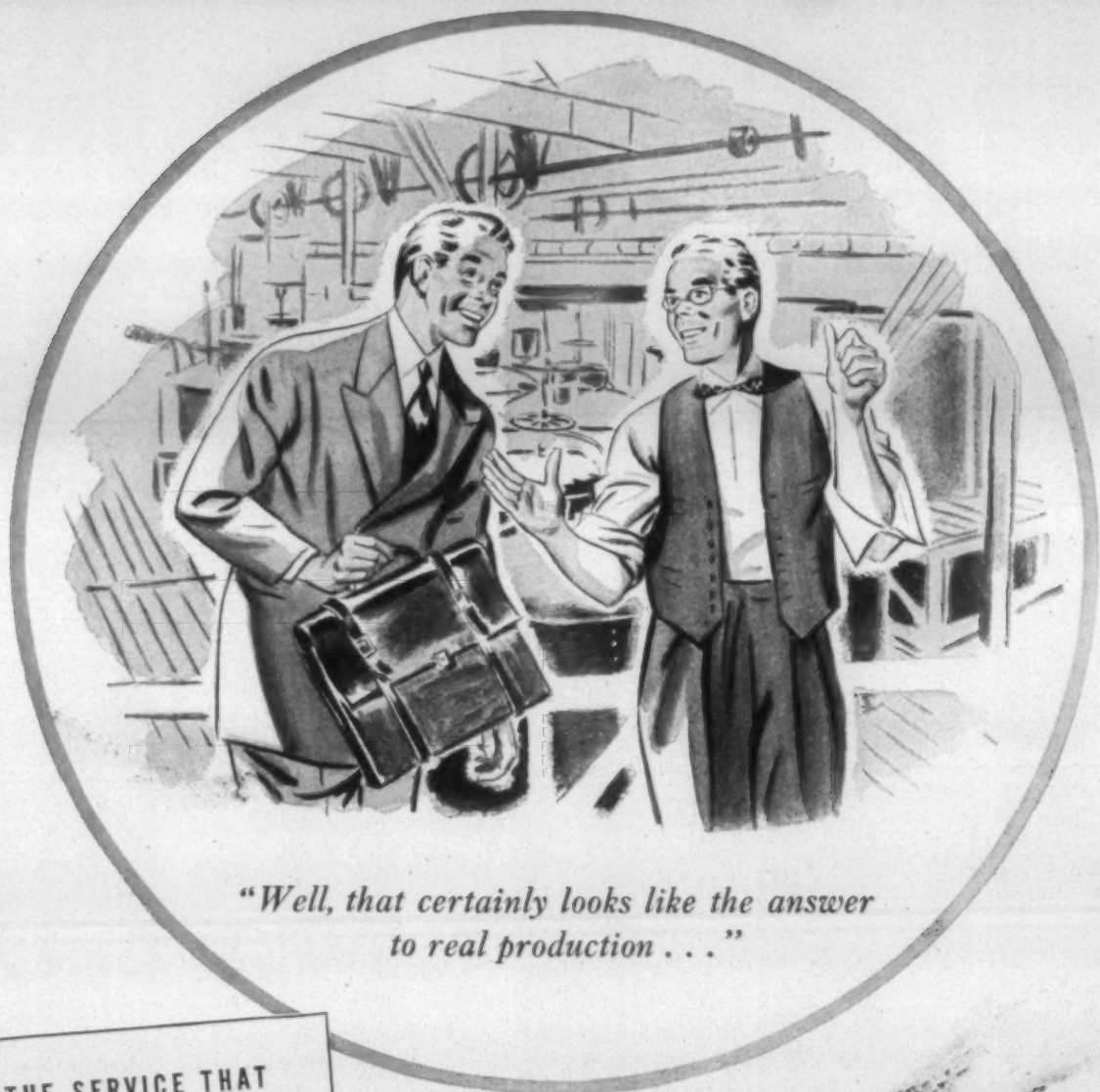
The Dawn of a New Era



We rejoice in the return
of the old-time Yule,
the joy of the season's true meaning —
and heartily wish you a

*Merry Christmas and
a bright New Year*





*"Well, that certainly looks like the answer
to real production . . ."*

THE SERVICE THAT BUILT OUR BUSINESS CAN HELP YOURS

Our business has been built largely on the practical help we have been able to give our customers, right in their own plants, in adapting Rohm & Haas products to their needs.

Our representatives are men with technical training and practical experience in the use of industrial chemicals. Call in a member of our textile chemicals department when you need assistance in choosing or using . . .

*Fine Chemicals For
Fine Quality Textiles*

MILL men often find that calling in a Rohm and Haas representative is a good way to iron out operating difficulties.

Take kier boiling, for example. Many mills have found in TRITON 770 — recommended by Rohm and Haas textile specialists — a means of improving the efficiency of the process.

TRITON 770 is more than an efficient surface active material. It suspends impurities in the caustic so they are not redeposited on the fabric . . . and, being very free rinsing, speeds up the draining of the kiers.

Effectiveness in low concentrations and in hard water are other characteristics of interest to mill men.

Let us know if you would like one of our men to call and tell you more about how you can get better results from kier boiling by using . . .

TRITON 770

TRITON is a trade-mark, Reg. U. S. Pat. Off.

Represented in Canada by Rohm & Haas Company of Canada, Ltd., Toronto; and in South America by Cia. Rohm y Haas, S. R. L., Carlos Pellegrini 331, Buenos Aires, Argentina, and agents in principal South American cities.

ROHM & HAAS COMPANY

WASHINGTON SQUARE, PHILADELPHIA 5, PA.

Manufacturers of Chemicals for the Textile, Leather and other Industries . . . Plastics . . . Synthetic Insecticides . . . Fungicides . . . Enzymes



DEC.
by
Co., one
cloth in
men in
no mean
as essen
nent and
claim the
by his w
born Feb

Train
jeweler,
in ten y
talking t
turer he
until I v
kind of
ufacture
charge o
George M
had it on
smith fir
manufac
land mil
a widely
Industry
economic
writings
and '90s

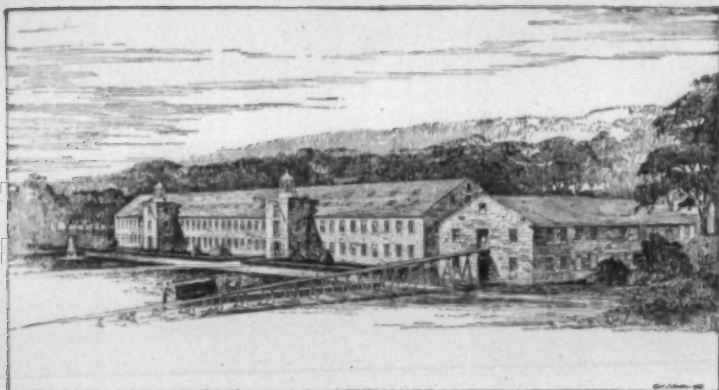
A Full-T

The p
strong th
his jewel
the rest o

The fa
of cash
much fro
leadershi
of some
that the
interest
stockhol
trial and

TEXTILE

Graniteville, Observing Its 100th Anniversary, Reflects Leadership of Founder William Gregg



The Graniteville mill as built by William Gregg in 1846.

DEC. 15, 1945, marked 100 years since the chartering by the South Carolina Legislature of the Graniteville Co., one of the oldest and largest manufacturers of cotton cloth in the South. William Gregg is one of the significant men in American social and industrial history. He was by no means the first Southerner to believe in manufacturing as essential to Southern welfare, but he was the most eminent and influential men in the ante-bellum period to proclaim the gospel and by practical success to prove his faith by his works. Mr. Gregg, we know from an old letter, was born Feb. 2, 1800, in Brownsville, Pa.

Trained to the trade of watchmaker, silversmith and jeweler, Mr. Gregg settled in Columbia, S. C., in 1824 and in ten years had accumulated a fortune of \$100,000. In talking to the school boys after he became a great manufacturer he used to say: "I never took off my workman's apron until I was worth \$50,000. Now, boys, go to work." A kind of chance gave Gregg his first start as a cotton manufacturer during a year of nominal repose when he took charge of the unprosperous Vacluse, S. C., plant of George McDuffie in the present Aiken County, and he soon had it on its feet. After joining a large jewelry and silversmith firm in Charleston in 1838 he continued the study of manufacturing, including thorough inspection of New England mills. In 1844 he published in the *Charleston Courier* a widely influential series of articles entitled "Domestic Industry," which helped to inspire the South to a broader economic life—articles unparalleled in the South until the writings of D. A. Tompkins were published in the '80s and '90s.

A Full-Time Cotton Manufacturer

The pull of his inherent genius as a manufacturer was so strong that in 1845 he became virtually a silent partner in his jewelry business and soon sold his interest and devoted the rest of his life to cotton manufacturing.

The fact that William Gregg was able to raise \$300,000 of cash capital for his Graniteville company shows how much free capital there was in the South waiting for such leadership as his. Yet he had to fight against the opposition of some of the leading statesmen of the South who feared that the development of manufacturing might create an interest dangerous to slavery. The annual reports to his stockholders are veritable war cries in a crusade for industrial and social betterment. Mr. Gregg's death was itself an

expression of his life. When a flood broke the dam of his water power he worked deep in the water directing the workers, and died Sept. 12, 1867, from the illness which he contracted.

Mr. Gregg's trained lieutenant, Hamilton H. Hickman, for the next 31 years conducted the business with notable financial success. Under his son, Tracy I. Hickman, the only serious setback in the history of the company occurred. The president and directors were both blamed for continuing to pay large dividends as well as spend large sums for new equipment beyond what the cash resources at the time justified. In 1915-17 stockholders watched the unusual spectacle of a great property in a fundamentally sound condition going into a receivership simply for the lack of the cash that had been too freely spent.

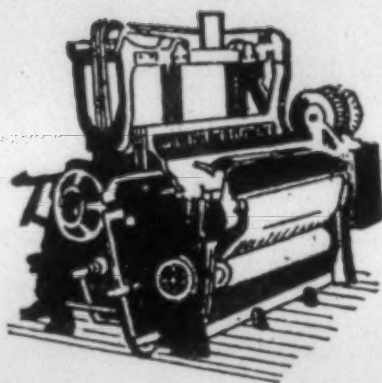
Present-Day Executives

It was about this time that Leavelle McCampbell began to buy heavily into Graniteville, as he recognized it as a fundamentally sound manufacturing property. As the largest stockholder, and for years the chairman of the board of directors, his wise direction of financial policies and his efficient salesmanship have aided greatly in bringing Graniteville to its present position and expansion, strength and prosperity. Under the present president S. H. Swint, pictured at left, Graniteville stands as one of the most important industrial enterprises in the South, with 171,140 spindles, 1,023 looms, seven plants and almost 5,000 operatives, producing in 1944 99,965,000 yards of cloth and dyeing 86,186,271. More than 1,280 of its employees were in the armed forces of their country. The company



paid to the Federal Government every day during 1944 \$10,000. Capitalization has increased from the original \$300,000 to \$2,000,000 with a \$5,933,291 surplus.

To the waging of each of the four wars in which our country has been engaged since Graniteville began to weave cloth, she has made her contribution not only of men and money, but of stupendous quantities of uniforms, tenting and other essential textiles. The significance of Graniteville's origin and history speaks well of the possibilities open to capital and labor in the South under competent leadership.



Loom Installations and Check-Ups

By H. E. WENRICH



MUCH progress has been made in the building of high-speed looms that will run many months without serious break-downs, but regardless of what type looms are in the weave shed, there are often sections where certain loom conditions continually give trouble and require a fixer's attention. In the same sections will also be many looms operating without trouble for many months. Certain reasons could be presumed, but placing one's finger on the imponderable is impossible. Something more concrete is necessary if a logical reason for these peculiarities are to be better known.

In the first place, there is a connecting link between a well-built loom and its possible efficiency, and a well-running section producing to its utmost capacity—and that link is the loomfixer. What a boon it would be to aspiring fixers and learners, if a formula could be found to do away with the months and years of "sweating out" an apprenticeship. But with no such formula existing, the way to learning the basic knowledge of loom adjusting and doing the job right is by the tried and tested method of "shirt-sleeve" action combined with authentic presentation of experiences such as the ideas and suggestions presented in this article. For the aim of this particular study is to cover several important loom adjustments and suggestions that will keep the loom running with a minimum of trouble.

Breaking in New Looms

When looms are newly installed, direct from the factory, considerable trouble can be expected for the first few months. A new loom, although machined as nearly perfect as the price tag will allow, cannot be put into production without first giving it a complete overhaul, and making desired alterations and adjustments in line with the policies of the weaving plant making such installations. Some of these alterations may be but small and minor changes or additions of extra parts and motions. The writer has had the privilege of visiting and exchanging ideas and methods with many textile firms, as well as having been in the service of a few large and small organizations, and has found that nearly every firm uses different ideas on setting up looms, varying in adjustments and settings.

In numerous instances, all the various methods of settings may somewhat resemble each other. Methods may often differ radically, but in checking up on required settings of certain looms motions, the basic needs and desired results of a certain setting or adjustment are, in principle, the same. Occasionally, when a better or quicker method of making a setting is found, an older fixer can switch into the newer

method more readily, knowing that a few minutes saved will often give him additional time to "play with" the more troublesome looms in his section. However, on new looms the quicker method is not so much desired in order to get the loom running and mounted within a few hours of installation, rather it is the means to an end in obtaining a method that will help to keep the looms up to efficiency after they are in production.

In some plants breaking-in a new loom is not considered in the production schedule and efficiency ratings are started as soon as the machine is cemented to the floor. Generally, in such haste to turn out a few additional yards, looms are mounted and started up within a few hours after placement. And from here on plenty of trouble develops. Imperfections mount rapidly on a hastily broken in loom. Fixers are often overloaded with break-downs; they fail to make proper adjustments and give attention to minor details, resulting in major breaks that not only tries their perseverance. This also encourages the more irritable to "blow their top," and impairs conditions until the weaving of satisfactory and saleable cloth is jeopardized so much that a good fixer is occasionally left out for the simple reason of misunderstanding the need for proper start-up of new looms.

The writer has discussed the starting of new looms with some mill men who favored the practice of mounting warps within a few days. Even this practice may be too hasty. Some foremen often assume that the loom is machined perfectly and should be capable of turning out first-class merchandise within a few days and at top efficiency. Loom engineers take for granted that after the loom has been installed and cemented down, a warp can be mounted and the loom should start producing both quality and production. Theoretically, this seems possible, but actual experience in the weave room will convince the most confident optimist that a new loom "as is" certainly needs some attention to turn out quality cloth at desired efficiency.

On some of the late model looms, speeds are geared up to 172 r.p.m. and over. Usually, the "over" is a sure means of trouble ahead. In one weave plant, all new looms are changed to lesser speeds for several months during the breaking-in period. This plant has an imposing reputation for quality fabrics, and that reputation has been gained through close co-operation with fixers and help in the weave room. After following one fixer's advice in reducing loom speeds temporarily and finding vast improvement in both quality and production off the new looms, the company inaugurated the system of requesting the opinions of employees within their organization on matters pertaining to

Stronger warps— yet still elastic

when you use

HOUGHTO - SIZE

NINE REASONS FOR HOUGHTO-SIZE:

1. A Simple Formula
2. Low Kettle Cost
3. High Breaking Strength
4. Elasticity After Sizing
5. Freedom from Shedding
6. Ready Weavability
7. Fewer Loom Stops
8. Easy De-sizing
9. That "Extra" Quality
—Helpful Service

Any size compound should increase breaking strength, but it may do so at the expense of elasticity, making a warp that is brittle and unable to elongate under loom tension.

Houghto-Size, our concentrated warp size compound, is devised to make warps stronger, yet retain elasticity. For example, in a recent Size Check-up Test made at a mill's request, Houghto-Size resulted in 19.8% greater breaking strength than with the size formerly used. Yet elongation was not harmed by increasing the strength. The unsized warp showed 5.87% elongation at breaking point, the competitive size reduced that percentage to 2.78%, but Houghto-Size resulted in 3.51%—a much less decrease in elongation.

For a test of your sizing procedure—at no cost nor interruption to production—write E. F. HOUGHTON & CO., Philadelphia or Charlotte.

HOUGHTON'S TEXTILE PROCESSING PRODUCTS

WARP SIZES...SOFTENERS...RAYON OILS...WETTING AGENTS...WOOL OILS

manufacturing technique. This new system turned up some interesting data.

It was discovered that a really good method of breaking in a new loom is the placing of reed into reed bed and positioning reed cap and handrail into place, and aligning the reed same as if a warp had been mounted. The center filling fork dagger was removed; detector needles were taken off temporarily, and shuttles placed into the loom in running condition. The loom was put under power and operated similarly to a regular run, but without the warp and filling yarn.

Running looms without warps is an ideal method of detecting weak points in picking, checking and other loom motion functions. Looms will bang-off occasionally, and the reason generally shows. As protection is still on the empty loom, the bang-off knocks off the power if knock-off action is correct. The shuttle is held in running position with a reed aligned, and a bang-off usually traps the shuttle at the box mouth or partly into the box. When fixers have spare time, they make the rounds of running and bang-off looms, and determine required adjustments to make each loom run smoother. This plan often allows the finer fixing adjustments to be made before a warp is mounted, and especially an excellent means of adjusting various parts and motions at a time when all are readily accessible and easily taken care of.

In the meantime, when several looms are in running-empty stage, various alterations are undergone and changes easier to make. At this time, looms are occasionally stopped and shuttle boxes checked for rough edges and other bruised or wearing spots that may cause snagging of filling yarns, and are a constant source of drag-ins, broken picks and correlative defects. However, broken picks and other imperfections cannot be detected until the warp and filling yarn is actually on the loom and in operation. And on new looms, plenty of rough spots and misaligned parts crop up from time to time until a certain amount of wear has developed.

Check Reed Bed

On swing-reed looms, it is best to make a thorough examination of the reed swinging bolts, springs and other parts. It may be desirable to replace factory-attached springs with lighter or heavier springs according to weave. Also check the race board edge and see if reed is positioned slightly away from the edge. If reed rubs against reed board, reed marks are a foregone conclusion. Distance should be approximately $\frac{1}{4}$ of an inch between race board and reed metal when reed is properly aligned along the ends. It may be necessary to cut away some race board edging with a good chisel or plane. Also examine height of reed bed. See that bottom clears $\frac{1}{2}$ of an inch when glass rod on top is level with race board. Place covering material on race board, and if necessary, reed bed can now be leveled slightly higher than covering level. This difference can be $\frac{1}{4}$, and as covering wears down, the difference increases another $\frac{1}{4}$ or greater, according to covering type and wear.

Check pivot points for free-swinging action. If reed binds at the top, it becomes obvious that swinging action at the bottom where it is required will also bind to a certain extent. It is generally acknowledged that if a swing reed binds during running time on light weaves barre cloth is a

foregone conclusion. Several other imperfections such as cracks are greatly pronounced. This weaving of defective cloth can be controlled better, so a better quality fabric is woven off the new looms only when every motion is thoroughly checked and made positive. One place often overlooked on new loom installations relating to reed swing is along the ends. If reed bed is slightly overlength it will press against the lay-sword tops and hinder free-swinging action. If reed bed is centered, check along the ends and make sure no binding hinders desired swing.



Reed swing depends primarily upon weave. On very light cloth constructions, it is occasionally difficult to obtain a perfect action. It can be obtained, however, by persistent attention to bearing points and springs, and observation of many minor places where contact with nearby parts may prevent desired freedom. As weave construction is stepped up in warp or filling count, the reed must be tensioned accordingly. If reed swing is too great, an overbeating action takes place, and this action becomes undesirable. Reed swing is generally adjusted between $\frac{1}{8}$ and $\frac{1}{4}$ -inch. Thus when the lay comes towards the cloth fell, the reed is in proper alignment for the shuttle to pass over the race board. As the shuttle passes out the shed, the lay continues onward to the beat-up line, and as the reed strikes the fell of the cloth, the reed gives according to desired swing distance of $\frac{1}{8}$ to $\frac{1}{4}$ of an inch. When reaching the maximum swing, the lay has turned over and started on its backward movement. As movement attains distance, the reed swings back into normal position for the subsequent shuttle flight.

Some weave plants favor a tight reed at all times; on certain loom makes, only a tight reed is possible. There are several interesting aspects to a tight or loose reed discussion—and worthwhile ideas turn up in such discussions. One of these angles pertains to reed wear. If a reed is absolutely firm at the bottom, and on striking the beat-up line, will the reed become damaged? If a reed is allowed to swing when the lay comes front center, will vibration cause reed damage?

It appears as if each motion has supporters recommending certain convictions, and at times, the weave room will have a run of damaged reeds that leads directly to reed action. The writer is convinced, however, that a tight reed will become damaged quicker and more severely than a swinging reed. But the main point of controversy is usually overlooked—the question on use of a tight or loose reed should be, "Which helps the most in producing a better piece of cloth?" And regardless of what type reed action, when new looms are installed, the reed bottom and cap should be thoroughly checked for perfect reed alignment. Otherwise, no loom will produce efficiently when shuttles fail to run true. (*To be continued.*)



BETTER GET WETSIT FOR INSTANT WETTING OUT

• WETSIT wets out faster—at lower concentrations—than any other agent we know. Gives instant, *complete* penetration in all types of textile fibres. Because WETSIT is a concentrated liquid, it's economical, easy to handle and measure, does away with the inconvenience of handling dusty, sneezy powders.

Equally efficient in neutral, acid or alkaline conditions, WETSIT is not affected by calcium and magnesium salts of hard water. It disperses and suspends lime curds formed by soap and makes rinsing easy. WETSIT can save you time and money in every stage of textile processing, in every operation where you want complete penetration—*instantly!*

BETTER BECAUSE...

- Faster
- Low Cost
- Completely soluble
- More efficient
- No waste



JACQUES WOLF & CO.
Chemicals PASSAIC, N. J.

OTHER PLANTS: CARLSTADT, N. J. • LOS ANGELES, CALIF.
WAREHOUSES: Providence, R. I., Philadelphia, Pa., Utica, N. Y.,
Chicago, Ill., Greenville, S. C., Chattanooga, Knoxville, Tenn.

Mechanization of Cotton Production Relative to Processing & Marketing

By FRANCIS L. GERDES, Senior Cotton Technologist
United States Department of Agriculture, Stoneville, Miss.

IT IS evident that complete mechanization of cotton production is emerging from the pilot plant stage, so to speak, and is becoming a practical venture in some areas. It has been brought out that virtually complete mechanization of cotton production on the farm has proved to be economically and technically feasible during the past two years on several plantations in the Yazoo-Mississippi Delta, and that plans for mechanization to be put into practice over wide areas, particularly on the larger farms, are now in advanced stages of development. Labor shortage and high costs of labor during the war years have been important factors in bringing about expansion in mechanized farming. But a realization on the part of Southern agricultural leaders that economies need to be sought in the production, marketing and manufacturing of cotton in order to maintain a stable and profitable industry is the principal factor responsible for the achievements made so far in mechanization of cotton production. Moreover, it is thinking of this kind that will, in a large measure, finally be responsible for any permanent changes in cotton production and marketing practices in the South.

The success attained so far with mechanical farming in the South has resulted from co-operative efforts on the part of farm implement manufacturers, interested cotton produc-

ers, gin operators, various gin machinery manufacturers and research workers. Obviously the problems involved in providing machinery and methods for mechanically producing and harvesting cotton were the first that required study; and, as previously mentioned, the progress already made in some of these fields is noteworthy. Increased attention is now being focused on the development and testing of production practices, varieties, plant-defoliation procedures, and cleaning (drying and ginning methods that will aid in maintaining the standard of cotton quality. The mechanization of cotton production has now reached such a stage of development that problems incident to marketing and manufacturing the mechanically-produced cotton must be dealt with in order to assure complete success in this enterprise.

The Flame Cultivator

It has been indicated that the flame cultivator and other cultural practices recently developed for the mechanical control of grass and weeds in cotton supplies the missing link in the chain of mechanical operations incident to complete mechanization of the cotton crop. Its availability will, no doubt, expedite mechanized cotton farming and increase the demand for mechanical cotton pickers. The flame cultivating process also offers possibilities for providing cleaner fields at harvest time with a consequent reduction in foreign matter from grass and weeds being harvested with the cotton.

Cotton is being harvested mechanically by the use of the spindle-type pickers and cotton strippers. The picker may be used throughout the season on cotton at all stages of maturity, but the strippers cannot be used until all of the cotton is fully matured and ready for harvesting. Moreover, strippers, so far, have failed to operate successfully in rank cotton. Therefore, their use has been confined primarily to the high plains section of Texas and to western Oklahoma where the cotton plants are small, and where weather damage to open cotton is less than in areas of heavy rainfall and high humidity. In the Mississippi Valley, greater weather damage is likely to be associated with stripped cotton than with mechanically picked cotton, because the harvest must be delayed until all bolls are fully matured. The spindle-type picker will successfully harvest early opened cotton without damaging green, unopened bolls. They are in operation on farms in this country more than 100 spindle-type pickers this season, with a capacity to harvest in excess of 20,000 bales. About one-half of these pickers are in operation in the Mississippi Delta. The operators of the delta pickers are ginning the cotton at about 20



This photograph from the U. S. Cotton Ginning and Fiber Laboratories at Stoneville, Miss., shows a McCormick-Deering mechanical cotton picker stripping bolls from the plants.

**YARNS MAY BE
SYNTHETIC...
BUT STATIC TROUBLES
ARE REAL!**

**ELIMINATE ALL
STATIC**

**WITH THE
CHAPMAN ELECTRIC NEUTRALIZER**

Each new synthetic, each new method, each new machine — has a new set of problems — some easily solved, others not so simply. For years the problem of static in textile mill routine was costly, time-devouring, constantly troublesome. Humidity controls are not the complete answer for static. And excess humidity is expensive.

Today, the Chapman Electric Neutralizer, in thousands of plants and mills is doing away with all static troubles on which static — from any cause — may otherwise slow down production or prove a nuisance or an expense.

Chapman Electric Neutralizers are eliminating static on:

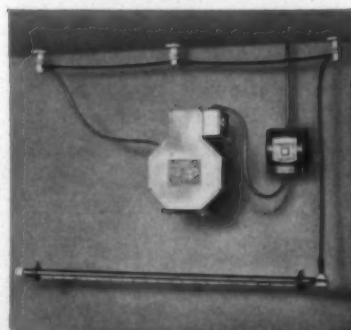
WOOLEN CARDS	WORSTED CARDS	FOLDERS
HIGH SPEED SLASHERS	GARNETTS	NAPPERS
HIGH SPEED WARPERS	COTTON CARDS	DRYERS

... and other machines, in many different operations, to speed production. And now, Chapman Neutralizers will expedite new peace-time output.

HOW IT WORKS — A Chapman Power Unit or transformer produces a corrective alternating charge at suitable tension, which is delivered through the Chapman Inductor Bar to the material. Whether the static charge is positive or negative, it is instantly neutralized, safely, by the corrective charge from the Inductor Bar.

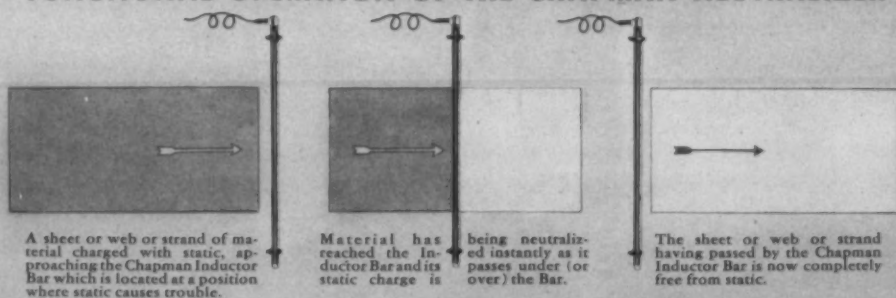
**STOP COSTLY DELAYS! SPEED PRODUCTION BY ENDING STATIC
NUISANCE ONCE AND FOR ALL!**

Call upon the Chapman Engineering Service! Write us! We will analyze your specific static problems.



WOOLEN CARDS
— all equipped with
Chapman Static Neutralizers.

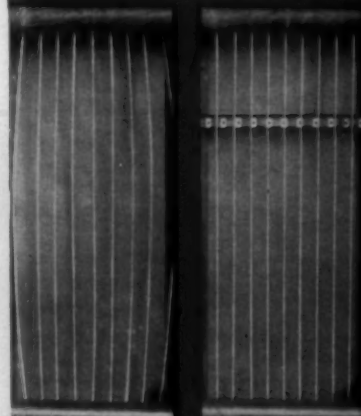
FUNCTIONAL OPERATION OF THE CHAPMAN NEUTRALIZER



CHAPMAN ELECTRIC NEUTRALIZER COMPANY

ESTABLISHED 1904

PORTLAND, 6, MAINE



BEFORE **AFTER**
WOOLEN ROVING
before and after static charges
are eliminated.

gins especially equipped to handle machine-picked cotton. All of the picker operators are employing plant defoliation methods and other practices in an effort to improve the quality of the cotton.

Because of the wide adaptability of the spindle-type picker in the Mississippi Valley and other level cotton-growing areas of high productivity, the problems involved in keeping leaf trash out of mechanically picked cotton and cleaning the cotton prior to ginning are receiving a great deal of attention in research programs of co-operating research agencies at Stoneville. Under most conditions prevailing in the Mississippi Valley, the increased trash present in lint ginned from machine-picked cotton is sufficient to cause reductions in grade designations as much as two or more grades, as compared with lint ginned from corresponding hand-picked cotton. The extraneous material in machine-picked cotton includes green or dry-leaf particles and sticks and stems. The amount of this foreign matter depends upon the condition of the plant, cleanliness of the field, and variety of cotton. These factors, together with the methods of cleaning employed at the gin, determine the percentage of foreign matter left in the lint cotton after ginning.

Activities under way at Stoneville, and under farm conditions elsewhere, to provide means for reducing the trash content of machine-picked cotton may be grouped into three principal categories, as follows: (1) the development of varieties of cotton possessing growth and fruiting characteristics especially adapted to harvesting with mechanical pickers; (2) induced defoliation of the cotton plants prior to harvesting in order to facilitate machine harvesting and to reduce the amount of extraneous matter in the seed cotton; and (3) the development of more effective equipment at gins for the conditioning and cleaning of seed cotton harvested mechanically.

The first step that can be taken to bring the grade of machine-picked cotton closer to that of hand-picked is to choose a variety of cotton more nearly adapted to mechani-

cal harvesting. Already cotton breeders are taking into consideration these needs in their breeding efforts, attempting to develop and furnish productive cottons of acceptable fiber quality that will be especially adapted to mechanical harvesting. This involves determination of fruiting habits of the plant and fiber qualities that contribute to decreased leaf trash in the seed cotton when harvested mechanically, and to efficiency in cleaning and ginning operations.

Tests made in 1944 in co-operation with the Delta Experiment Station, on cotton picked by hand and by a mechanical picker of the spindle type in a test field planted to five standard varieties having a narrow range of lengths, gave some very significant results. They showed very definite grade differences in results from mechanical picking as between varieties—some as wide as one full grade. To date, however, there are no conclusive data available to indicate that varieties are available or can be developed which will provide machine-picked cotton comparable in grade to that of hand-picked cotton and which, at the same time, provide satisfactory yields and fiber quality.

Dusting Practices

Dusting of cotton plants with calcium cyanamid during the harvesting season to cause leaf shedding has been found under experimental as well as practical conditions to facilitate mechanical picking and, at the same time, to reduce the amount of extraneous material in seed cotton. This practice has been especially effective where the physiological condition of the plant was favorable and moisture on the plant foliage was sufficient to create the chemical reaction needed for causing the leaves to shed properly from the plant, and where fair weather conditions remained long enough for the cotton to be machine-picked before a second growth developed from subsequent rains. It has been found that the application of the defoliant can be made as early as three weeks after the last bolls are set and still cause no adverse effects on the fiber and cottonseed qualities.

In tests recently completed at the Delta Experiment Station, the grades of machine-picked cotton of some varieties especially adapted to mechanical picking and defoliated a week before picking exceeded the grades obtained in 1944. Some of the machine-picked cotton graded as high as strict low middling, having middling color and strict low middling leaf. Another factor responsible for this improved grade as compared with grades obtained at Stoneville during previous years—low middling and lower—is likely to be found to be the newly developed cleaning systems employed in tests this season.

Cleaning Machinery

The development of efficient cleaning machinery for use at gins is considered to be absolutely essential if full economic benefit of mechanical production is to be realized. Severely newly developed devices were tried out experimentally last season by gin machinery manufacturers on late harvested weather-damaged cotton. The results were encouraging enough to justify the manufacture of a large number of these units for installation and use in gins where machine-picked or roughly harvested cotton is to be ginned this season. All of the units are used in combination with drying, cleaning and extracting machinery customarily employed in drying and cleaning hand-picked cotton. The



The mechanical cotton picker empties its load into a waiting truck.—(Photograph courtesy of U. S. Cotton Ginning and Fiber Laboratories, Stoneville, Miss.)



COLOR

...the Master Salesman

From the cradle to the grave - for useful and for artistic purposes - COLOR plays an indispensable part in our lives. To use color in textile products, is to employ THE MASTER SALESMAN, for color sells without the use of words.

To employ color most successfully in yarn dyed fabrics use Franklin Process Service. With 35 years of experience and with 4 yarn dyeing plants, this organization can help designers in selecting colors, can assist mills in obtaining yarns, and in running them with maximum profit.

Whether 1 plant or all 4 plants work for you, color quality will be the same, for all plants use the same formulas and equipment for standard shades.

Franklin Process
LARGEST PACKAGE DYERS IN THE WORLD

New York Representative, 40 Worth St.;

Chicago Representative, 100 W. Monroe St.

PROVIDENCE



PHILADELPHIA



GREENVILLE



CHATTANOOGA



CASTOR BEANS FROM BRAZIL AND INDIA



"FROM SOURCE THROUGH SULPHONATION—CYANAMID CONTROLS THE QUALITY"



One of Cyanamid's modern large-capacity units for the production of textile chemicals. Large-scale production means greatest possible uniformity in chemical supply.

AMONG CYANAMID PRODUCTS FOR THE TEXTILE INDUSTRY ARE...

Penetrants • Softeners • Finishes
Sizing Compounds • DECERESOL® OT Wetting Agents
PARAMUL® 115 Water Repellent, and other specialties
and Heavy Chemicals

*Reg. U. S. Pat. Off. **Trade-Mark

During the past few years the difficulty of obtaining natural oils from abroad has made it necessary for textile mills to use sulphonated oils made from domestic oils almost exclusively. Those who have used Cyanamid products have not only found them consistently high in quality but consistently *available*. For Cyanamid has established completely reliable sources of supply for its domestic oils and employs modern, large scale equipment in processing them. For example, Cyanamid's sulphonated castor oil has been available in large quantities to meet the most exacting requirements and has helped many mills to maintain high standards in the quality of their textile products. Whatever your demands, you can depend on Cyanamid as a steady, reliable source of supply for:

IMPORTED—

Olive Oil
Tea Seed Oil
Cocoanut Oil
Babassu Oil
Rape Seed Oil
Sperm Oil

DOMESTIC—

Castor Oil
Red Oil
Peanut Oil
Corn Oil
Cottonseed Oil
Soya Bean Oil

American **CYANAMID** *& Chemical Corporation*

(A UNIT OF AMERICAN CYANAMID COMPANY)

30 ROCKEFELLER PLAZA • NEW YORK 20, NEW YORK



new systems this year embrace principally the unit known as the "impact cleaner," and that designated as the "multi-unit reciprocating cleaner-drier."

While the newly developed cleaning systems entail distinct improvement in cleaning processes for machine-picked cotton, and are aiding in bringing the grades of machine-picked and hand-picked cottons closer together, it appears that completely successful adaptation of mechanical harvesting to the American cotton crop is likely to depend also upon the development of equipment for the economical and satisfactory extraction of extraneous matter from the ginned lint, after its separation from the seed and before pressing into bales at the gins. Research directed to the development of equipment to accomplish this purpose is now under way in connection with the investigations of the U. S. Cotton Ginning Laboratory. With more complete application of mechanization to cotton production, research work of this nature will be intensified.

Importance to Spinners and Weavers

To you spinners and weavers interested in cotton holding its own in relation to competitive fibers, it should be of interest that it is recognized that we must continue to be on the alert and seek improved methods for cleaning machine-picked cotton to make it compare favorably with hand-picked cotton from a manufacturing waste standpoint. This is the only element of spinning quality in which machine-picked cotton is decidedly deficient, generally showing about five per cent higher manufacturing waste than corresponding hand-picked cotton. When the excess foreign matter is finally removed from this cotton in the preliminary cleaning and carding processes in the mill, the color of machine-picked fiber is generally as desirable as that of the fiber from hand-picked cotton. The tensile strength of the fiber is approximately the same for the cotton representing both methods of harvesting under otherwise similar conditions. There is gradually being accumulated sufficient evidence through laboratory spinning tests and commercial mill tests to indicate that the strength of the yarn spun from machine-picked cotton exceeds that of the yarn spun from hand-picked cotton grown and harvested under similar conditions. At least it can now definitely be concluded that machine picking preserves yarn strength and appearance as well as hand picking. It is conceivable for machine-picked cotton to give higher yarn strength than hand-picked cotton because field tests have shown that the machine passes up more immature locks of cotton than hand pickers.

With the concerted efforts that are being put forth to develop means for making machine-picked cotton more merchantable, those concerned with the problems involved are gratified with progress already attained and optimistic over that in prospect. In addition to the research designed to enhance the value of the lint, we should not overlook the possibilities that now exist for obtaining certain quality benefits under existing conditions through more timely machine harvesting of cotton forced to maturity through defoliation, as compared with hand picking over a long period with the accompanying possibility of weather damage between pickings. Under average plantation operation practices, it generally requires at least 90 days to hand pick a crop. With mechanical pickers, it is likely that a crop can be harvested in a much shorter period with a substantial reduction in weather damage to the cotton. It was observed

last year that usually when machine and hand picking was performed on the same day, the grade differences of the lint ginned from the cotton harvested by the two methods were two or more grades in favor of hand picking, but on a crop basis where machine picking was more current with crop maturity than hand picking, the grade differences averaged less than 1½ grades on six plantations in the delta during the season of 1944. Obviously, a machine-picked crop of cotton represents a much narrower range in quality than a hand-picked crop.

The shortening of the harvesting period, and associated reduction in weather damage through the use of mechanical cotton pickers, should contribute very materially toward increasing the uniformity of the spinning quality of lint from the beginning to the end of the season. From this standpoint also, suitable cleaning machinery at gins now under development, will prove to be advantageous. With successful efforts in this work, the cotton gin of the future for mechanized farming areas will be so extensively equipped in these respects that large volumes of ginning during a shorter ginning period will be required to make such an enterprise a financial success. Evidence to this effect has already been shown. The mechanization of cotton production and large volume ginning enterprises are factors expediting the production of one-variety cotton in quantities sufficient to attract the attention of agents of textile mills, many of whom now recognize the advantage of pure-variety lots over mixed-variety lots.

The one-variety programs make it possible to systematically increase the production of new strains of cotton being bred with emphasis on improving (*Continued on Page 60*)



Glame, a new plastic fabric which drapes like cloth and changes color under colored lights, is the invention of Maurice Brule, textile designer of Central Falls, R. I. It is made of regenerate cellulose manufactured by Sylvania Industrial Corp. and can be produced in 26 different weights for manufacture into such items as handbags, hats, upholstery and curtains.

DYEING AND FINISHING

Dyers and the Study of Dyeing

By GEORGE BROWN—Part Three

THE initial article of this series (*see June 15 issue of TEXTILE BULLETIN*) outlined the desirable laboratory equipment used by dyeing and finishing plants in handling raw stock, packages, piece goods as well as hosiery and other knit goods. Part Two (*Aug. 15 issue*) emphasized the necessity that all dyers and their assistants who wish to give themselves self-training for the testing of dyes and dyeing and finishing agents should first obtain books on the fundamentals of textile chemistry and dyeing. It was also suggested that good use could be found for short laboratory manuals covering the carrying out of tests for the action of alkalies, bleaching agents, wetting agents, etc., in familiarizing oneself with the results of each type of chemical agent on the various fibers to be handled.

Four tests suggested for dyes were: (1) determining the effect of sodium chloride on the exhaustion of direct colors on cotton; (b) determining the effect of varying temperatures in the dyeing of direct colors on cotton; (3) determining the effect of short and long dyeing periods for direct colors on cotton; and (4) determining the dyeing and resisting effect of direct colors in the presence of other fibers. Along this line, the current article will continue a series of practical tests which will help illustrate to the less experienced how valuable, simple and definite tests can be used to locate and solve some of the simple plant complaints and problems which arise in dyeing and finishing operations.

Recording Tests and Results

It is essential to a person interested in the basic facts about textile chemicals, dyes, assistants and finishing agents that he learn how to prepare a short notebook in which results of all tests can be put in written form, accompanied by a sample from each test. Thus there is an opportunity to refer easily to the recorded data on results of tests as well as samples. Such information gradually will become imprinted on one's memory; learning technical facts in this manner will be of great value to the novice as well as his company, in that it increases the amount of practical knowledge and ability to work. An example of steps in preparing a test record is given below.

Title of Test: Determining the effect of sodium chloride on the exhaustion of direct colors on cotton and other fibers (aralac, mercerized cotton, viscose rayon, wool and silk).

Procedure of Test and Material Used: For each direct dyestuff tested four ten-gram cotton skeins (boiled out) were used. One skein was entered into four beakers containing three per cent of the direct dyestuff (dissolved) on weight of ten-gram cotton. The four beakers were placed in a hot water or hot air bath and heated.

No. 1 was raised to 160° F.; No. 2 to 180° F.; No. 3 to 200° F.; and No. 4 to a boil. These skeins in each dyeing were worked for 20 minutes at the respective temperatures, then 30 per cent salt (on weight of cotton) was entered into bath and run 20 minutes longer; then dyed yarns were removed, rinsed and dried.

Dyes Used for Tests: Direct Sky Blue 6B, Direct Chrysophenine G.

Results of Tests: It was observed that Direct Sky Blue 6B showed practically no exhaust or take-up on the cotton yarn while being run 20 minutes before the salt was added.

Chrysophenine G started exhausting immediately at each dyeing temperature before the salt was added, and after salt was added Direct Sky Blue 6B exhausted very rapidly as compared to the Chrysophenine on addition of salt; both of the colors exhausted to varying degrees of strength according to temperatures used.

The dyed yarns show that the dyeings of Direct Sky Blue 6B dyed at 160 to 180° F. are considerably weaker in strength as compared to the No. 3 and No. 4 dyeings, and there is not as noticeable a difference on Chrysophenine G in color strength on Nos. 1, 2, 3 and 4 as on the Direct Sky Blue 6B dyeings.

Mounting of Dyed Samples

The dyed yarns can be wrapped on a small piece of white cardboard and glued at the back, then clipped to the sheet showing results of tests. Proper percentage of dyestuff, salt, etc., time and temperature can be noted beside each set of dyeings. A properly prepared record and mounted sample will give a beginner an opportunity to freshen his memory about all tests which have been run.

Questions may be added to tests for the future aid of beginners such as (1) What would be the value of the lower dyeing temperatures?; and (2) Do these two colors act differently in exhausting onto the cotton and would this difference in exhaust cause trouble in dyeing shades employing two or more colors? These questions are too far advanced for the beginner at this stage, but they might start consideration of streaked dye lots that he has seen in the dyehouse and which have required careful stripping and reworking.

A fifth test which follows the four already covered is to determine the level dyeing properties of direct colors by dyeing compound shades at different temperature with and without penetrants in the dye bath. (The beginner can take several rapid exhausting colors when salted and use them in compound shades with slower exhausting colors. Self shades of a color are those using only one color, while compound shades may use two or more colors in varying proportion.)

Use three primary colors—red, yellow and blue—and then dye them in different proportion on cotton yarns with and without penetrant in bath at 170° F. and 200° F. with



—back in 1820: When the Public Debt was less than 67 million dollars and there was not a mile of railroad in the United States — 24 years before the Mercerizing Process was discovered — John Butterworth established this business in Philadelphia to serve the Textile Industry. . . .

And we have been at it ever since.

125 years of pioneering in the Textile Industry . . . 125 years designing and building machines—striving always to keep ahead of the demands for bigger, better, faster production . . . 125 years of day-in and day-out contact with the problems and opportunities of Textile manufacturers . . . We are proud to have played a part in the development of "Textiles" from a handful of family-sized plants to its present position as America's Second Industry.

Butterworth Service includes a complete line of Machinery for bleaching, mercerizing, dyeing, drying, printing and finishing fabrics and warps; calenders for cotton and rayon fabrics; spinning machinery for rayon filament yarns.

Butterworth Research keeps informed on the new developments in Textiles and Textile-finishing. Butterworth Engineering strives to interpret each new development in terms of Machine Design and Plant Arrangement. Write us.

BUTTERWORTH

H. W. BUTTERWORTH & SONS COMPANY, Philadelphia 25, Pa.
TEXTILE FINISHING MACHINERY COMPANY DIVISION, Providence, R. I.
1211 Johnston Building, Charlotte, N. C. W. J. Westaway Co., Hamilton, Ont.

addition of common salt. Rapid exhausting colors include Direct Scarlet 4B, Direct Sky Blue 6B and Direct Yellow G. Slower exhausting colors include Direct F Red 8BL, Direct F Blue 4GL and Direct F Yellow 4GL.

From each group compound dyeings using two or three colors run in varying proportions with and without two per cent penetrant, at 170° F. and 200° F., using ten per cent salt for light shades, 25 per cent for medium shades and 40 per cent for heavy shades. After dyeings have been completed for rapid and slower exhausting colors, then cross compound shades are run, using some rapid and slower exhausting colors in each dyeing with and without penetrant.

From the results a dyer can observe quickly that green compound shades are difficult to dye and control relative to levelness and shade, thus requiring a satisfactory penetrant plus well boiled out cotton and a temperature high enough to give good color exhaustion.

When run with the slower exhausting direct colors the light to heavy compound shades will usually give more level results when dyed at 170° F. than rapidly exhausting colors dyed at 200° F. They will also require less penetrant if yarns have been prepared properly. Result from the dyeing of these compound shades will prove of great assistance to the beginner if an entire range of colors is run, using two groups of fast and slow exhausting colors; thus one can learn the rudiments of using primary colors in shade matching, as well as how rapidly exhausting, non-level dyeing direct colors can be controlled through the proper use of penetrants, levelling agents, etc.

There are other rapidly exhausting direct but not primary colors which may be used to advantage in this fifth test. They include Direct Brown GR, Direct Bordeaux B, Direct Green B, Direct Fast Yellow BL, Direct Red F, Direct Blue 2B and Direct Brown 3GN. Slow exhausting colors under this heading are Direct Fast Brown GL, Direct Fast Yellow RL, Direct Fast Blue-Green B and Direct Fast Black L.

Philadelphia Colorists Hear Talk on Nylon

FROM a dyer's standpoint, the dispersed acetate colors are at present the best for nylon, but in the future they undoubtedly will be replaced by other types possessing superior fastness, according to A. K. Saville of E. I. du Pont de Nemours & Co., Inc., speaking at a recent meeting of the Philadelphia Section of the American Association of Textile Chemists and Colorists. In addition to the acetate colors, acid, direct, vat, azoic and chrome colors are employed for dyeing nylon. However, new advances in dyes and dyeing techniques are necessary before nylon can be dyed with the ease with which the older synthetic fibers are colored. An abstract of Mr. Saville's talk follows:

The dispersed acetate rayon dyes may be dyed on nylon from an aqueous dyebath set with soluble oil, soap or other dyeing assistants normally used for the dyeing of cellulose acetate rayon. The goods are entered at 100° F., the temperature raised to 180° F. in 15 minutes and the dyeing continued at this temperature for 45 minutes to an hour, a rinse in warm water completing the operation. In general, the properties of the same dye on the two fibers are approximately the same. However, some differences do occur.

Shade variations between a dyestuff on nylon and the same color on acetate are particularly apparent in the reds and oranges, the shades being considerably duller and bluer than on acetate rayon.

If combinations of acetate colors are chosen on the basis of good working properties on acetate rayon, there should be no difficulty in applying them to nylon. In light and medium shades the dyebath exhausts to much the same degree on nylon as it does on acetate rayon. As depth of shade is increased, however, the percentage of color exhausted falls off more rapidly on nylon than on acetate. Nevertheless, if care is taken to choose colors which build up heavy shades on acetate with facility, no trouble should be encountered in producing all but the heaviest shades on nylon.

Difference in Fastness Properties

The fastness properties of the dispersed acetate dyestuffs on nylon differ somewhat from the fastness of the same dyes on acetate rayon, this difference in fastness varying with the individual colors. In general, the fastness to light of the acetate colors on nylon is slightly inferior to the same colors on acetate rayon. The fastness to washing of a given color as determined by three consecutive ten-minute washes at 120° F. in the presence of 0.5 per cent soap is slightly higher on acetate rayon than on nylon. In other fastness tests, such as fastness to water and to acid or alkaline perspiration, substantial agreement between the fastness properties of the colors on nylon and acetate rayon is found.

In one property, however, the fastness between dyed nylon and cellulose acetate differs markedly. When cellulose acetate dyed in blue or violet shades is exposed to gas fumes or stored in the presence of atmospheric oxides of nitrogen, pronounced color change occurs, with the development of a pink tone in the dyed material. On the other hand, for all practical purposes, nylon dyed with acetate blues may be considered gas fume resistant.

Diazo blacks can be applied to nylon in the manner described for direct dyeing types, but if the amount of sodium nitrite and hydrochloric acid normally suggested for the diazotization and development of these colors on acetate rayon is used, reddish-black shades are produced. Increased time of diazotization effects an improvement, but it has been found that better results are to be obtained by doubling the customary quantities of sodium nitrite and acid employed. After dyeing, the goods are rinsed and diazotized for 30 minutes in a cold bath containing three pounds of sodium nitrite and seven pints of 32° twaddle hydrochloric acid per 100 gallons of liquor and, after rinsing, developed in a cold developing bath containing four to five per cent of Acetamine Developer AD made slightly acid with acetic acid. The temperature of the bath is slowly raised to 140° F. and development continued for 30 minutes. By this method, full shades of blacks with properties similar to the properties of acetate rayon so dyed are produced.

Light shades can be readily produced on nylon with any acid color from standard dyebaths. In general, however, the leveling, or acid dyeing types on wool, have low saturation points on nylon and, will, therefore, be suitable only for the production of medium or light shades. The neutral dyeing colors have a considerably higher saturation point and may find use in the production of heavy shades, such as bottle greens, navies and blacks. A further difficulty encountered

in the use of acid colors on nylon is that combinations of acid colors are not absorbed in proportion to their concentrations in the dyebath, and the presence of one color, in small amounts, in a mixture may inhibit the dyeing of one or more colors present in much larger amounts. This selective absorption proved unpredictable and, at the present, combinations must be chosen on a trial and error basis.

No close parallel appears to exist between the fastness to washing of acid colors on nylon and on wool, but in a majority of cases the fastness of these colors on nylon is appreciably greater than the same colors on wool. Normal wash test procedures have so little effect on nylon dyed with acid colors that a new washing test involving two consecutive 30-minute washes at 180° F. in the presence of 0.5 per cent soap and 0.2 per cent soda ash was adopted. In many instances almost complete removal of the color on wool is effected by this washing procedure, whereas the color on nylon is not affected.

Affinity of Vat Colors

In general, the vat colors, when applied to nylon by methods commonly used in the dyeing of cotton or rayon, exhibit indifferent affinity. However, the affinity of nylon for vat colors is considerably improved if the dyeing temperature is raised from the normal 140 to 150° F. to 190 to 212° F., Sulfoxite C being used as a reducing agent in place of hydrosulfite, which is unstable at this high temperature. Under these conditions considerably heavier shades can be produced than are obtained by conventional methods and these dyeings are considerably faster to crocking and are very fast to washing. However, the fastness to

light of these colors as determined by Fade-Ometer tests is particularly disappointing. Recent studies indicate that the vat colors may show a greater resistance to sunlight than is indicated by Fade-Ometer exposure.

By applying the naphthanil and bases individually in consecutive baths, brighter and stronger shades can be obtained than by the older one-bath method for applying the azoic dyes. After impregnating the nylon with naphthanil from an aqueous alkaline bath at 140° F., the fiber is extracted to remove excess moisture and immersed in a separate bath made acid with HCl containing the desired base for 25-30 minutes at 140° F. Following this, the extracted nylon is developed in a sodium nitrite-acid bath and soaped. All dyeings of azoic colors on nylon are much yellower or bronzer in shade than the identical combinations on cotton. Most combinations giving a scarlet shade on cotton dye nylon orange. However, combinations usually producing an orange tend to give redder or browner, not yellower shades on nylon. The majority of azoic colors appear to have excellent fastness to all color-destroying agents, with the exception of light.

Tighter restrictions on sales of finished piece goods by producers to jobbers were announced Nov. 29 by the Office of Price Administration. Under the regulation (Amendment 3 to Maximum Price Regulation 127), limits are placed on the quantities of finished piece goods that can be sold by integrated producers to customers other than cutters, manufacturers or retailers. The amendment also places quotas on sales of finished piece goods by integrated producers on a quarterly rather than an annual basis.



TEXTILE PROCESS COMPOUNDS

MINOTINTS

Oil-base fugitive tints for all synthetic and natural fibers.

Identification - Lubrication - Conditioning

RAYON OILS
TINTINOLS
LYNOL

SS BASE OIL
MINEROL
MEON

BRETON OILS FOR WOOL

BORNE SCRYMSEY COMPANY

Office and Works
ELIZABETH, N. J.

Established 1874

Southern Warehouse
CHARLOTTE, N. C.

PERSONAL NEWS

William C. Horton, Jr., of Patent Button Co. has been elected president of the Atlanta (Ga.) Textile Club. Claude Fitts of Fitts Cotton Goods has been named vice-president, Harry M. Gunnin of Cannon Mills Co., secretary, and Carl D. Fields of M. Lowenstein & Sons, treasurer.

Hugh Comer, president of Avondale Mills, Sylacauga, Ala., has been elected a national vice-president of the National Association of Manufacturers. William M. Rand, president of Monsanto Chemical Co., St. Louis, Mo., was also named a national vice-president at the recent N. A. M. convention in New York City. Elected as state director for South Carolina was R. E. Henry, president of Dunbar Mills at Greenville. Among the present state directors are Fuller E. Callaway, Jr., of Callaway Mills at La-Grange, Ga., Norman E. Elsas of Fulton Bag and Cotton Mills at Atlanta, Ga., Herman Cone of Proximity Mfg. Co. at Greensboro, N. C., S. W. Cramer, Jr., of Cramerton (N. C.) Mills, Inc., Harry L. Derby of American Cyanamid & Chemical Corp. at New York City, and H. W. Prentiss, Jr., of Armstrong Cork Co. at Lancaster, Pa.



E. Owen Fitzsimons, left, has resigned as manager of the Washington office of the Cotton-Textile Institute in order to devote all of his time to duties as executive director of the Carded Yarn Association. His headquarters will be at the association offices in the Liberty Life Building, Charlotte, beginning Jan. 1. Mr. Fitzsimons joined the institute in 1933 and served as its Southern field agent, later adding the duties of secretary-treasurer of the Carded Yarn Association upon its formation in 1936.

Carroll Bowen, son of B. M. Bowen, superintendent of Salisbury (N. C.) Cotton Mills and president of the Southern Textile Association, has been named on the "Little All-American" football team, which is chosen each year from players at smaller colleges. The younger Bowen is a student at Catawba College, Salisbury, and holds an honorable discharge from the Marine Corps.

Norman W. McCall is now general overseer of carding and spinning at the Wateree Plant of the Kendall Co., Camden, S. C., having been promoted from the position of overseer of carding.

John P. Gilmore has retired from duties as night superintendent and overseer of twisting at Goodyear Clearwater Mills, Rockmart, Ga. Company officials honored him at a banquet recently.

John L. Defandorf has been appointed general engineering supervisor over the textile equipment division of Cutler-Hammer, Inc., manufacturer of industrial controllers at Milwaukee, Wis.

William C. Miller, shown at left below, has been elected treasurer of Industrial Rayon Corp., Cleveland, Ohio. He succeeds D. S. Mallory, who has retired after 20 years



in the post. George C. Miller, II, right, has been named assistant secretary and assistant treasurer of the company.

William R. Crabtree is now general manager of Firestone Cotton Mills at Fort Worth, Tex. He succeeds R. M. Sawyer, who has been assigned to the Firestone plant in Brazil. Mr. Crabtree was formerly manager of Firestone Textiles at Bennettsville, S. C., and recently held an executive position at the Brazilian plant.

Joseph W. Sears, pictured at left below, has been appointed district sales manager at Houston, Tex., for the Link-Belt Co. of



Chicago. Stuart Penick, right, replaces Mr. Sears as the company's district sales engineer at its Dallas plant.

WITH THE GOVERNMENT—John W. Lake has been appointed deputy director of the Civilian Production Administration's textile division. He has been and will con-

tinue to act as chief of the division's shoe branch. . . . Robert H. Evans, formerly chief of the War Production Board's pulp allocation office, has become executive assistant to the management of Reigel Textile Corp., New York City.



Sidney M. Edelstein, left, has been appointed technical director of the new textile chemical division of Dexter Chemical Co., New York City. For the past six years he has been director of research for Hart Products Corp., and prior to that was a research associate for the American Association of Textile Chemists and Colorists.

W. M. Carlisle has been appointed general superintendent of the Gossett Mills plants at Anderson, S. C. He has been superintendent of the Riverside Plant, and succeeds Newton G. Hardie.

WITH THE MILITARY—Lieut.-Comdr. S. Reed Anthony (Navy), Capt. Maclean Williamson (Army), and Lieut. C. David Reich (Army) returned Dec. 3 to the rayon staple fiber sales division of American Viscose Corp. at New York City. . . . J. Fred Sumner, left, a veteran of ten months' Marine Corps duty in the Southwest Pacific, has joined the sales engineering staff of National Ring Traveler Co. He is attached to the company's Charlotte office and will operate chiefly in North Carolina. Prior to entering service Mr. Sumner was associated with American Yarn & Processing Co. at Mt. Holly, N. C., and Sellers Mfg. Co. at Saxapahaw, N. C. . . . Maj. Robert P. Cochran, Jr., who served four years with the Army Quartermaster Corps, has been appointed research director for Dixie Mercerizing Co. at Chattanooga, Tenn. . . . Maj. Robert P. Moore has rejoined Dacotah Cotton Mills, Inc., at Lexington, N. C., following four years of Army service. . . . Lieut.-Col. Harold W. Stiegler, lately of the Army's Chemical Warfare Service, has been appointed director of research for the American Association of Textile Chemists and Colorists, and will make his headquarters in the A. A. T. C. C. laboratories at Lowell (Mass.) Textile Institute.



Houghton Wool Tops

PROMPT SHIPMENT ALL GRADES ON SHORT NOTICE

SUITABLE FOR BLENDS WITH RAYON OR COTTON

Write or Phone Our
Sou. Representative
JAMES E. TAYLOR
Telephone 3-3692
CHARLOTTE, N. C.

HOUGHTON
WOOL COMPANY
253 SUMMER STREET ★ BOSTON

We've got your SIZE!



• SEYCO size films are more pliable and elastic, resulting in better weaving. Try SEYCO and see for yourself.

SIZING ... PENETRANTS ... ALKALIS ...
SOFTENERS ... SHUTTLE DRESSING
"TWIST-SETTER" MACHINES

SEYDEL-WOODLEY & CO.
TEXTILE CHEMICALS
148 RICE STREET ATLANTA, GA.



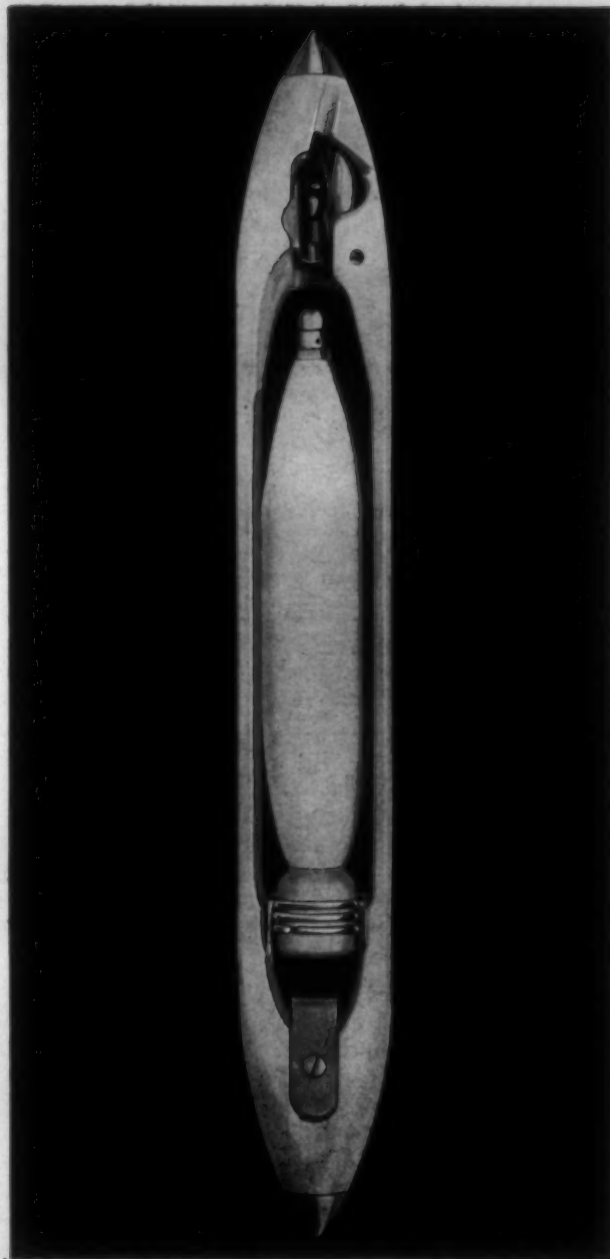
CLINTON

STARCHES

*** **FOR ALL**
TEXTILE USES

- ★ QUALITY
- ★ UNIFORMITY
- ★ SERVICE

CLINTON COMPANY
CLINTON, IOWA



PRECISION BOBBINS

are made to meet the most rigid tests before shipment.

Southern Representatives

THE CHARLOTTE SUPPLY CO.
Charlotte, N. C.

HENRY H. HERSEY
Norwood Place
Greenville, S. C.

ARTHUR W. HARRIS
443 Stonewall St. S. W.
P. O. Box 1982
Atlanta, Ga.

NEW ENGLAND
BOBBIN & SHUTTLE CO.

George M. Hambleton, Gen. Mgr.
NASHUA, NEW HAMPSHIRE
Telephone: 2406

textile bulletin

Published Semi-Monthly by

CLARK PUBLISHING COMPANY

P. O. Box 1225 — CHARLOTTE 1, N. C. — Telephone 3-5586

Offices and Plant: 218 West Morehead Street

David Clark	President and Editor
Junius M. Smith	Vice-President and Business Manager
James T. McAden	Associate Editor
Maj. Ellis Royal (On leave in U. S. Army)	Associate Editor
Andrew Hewitt	Assistant Editor
F. R. Carey	Vice-President and Eastern Manager

(P. O. Box 133 — Providence, R. I. — Telephone Williams 3957)

One year payable in advance	\$1.50
Other countries in Postal Union	3.00
Single copies	.10

Textile Bulletin is a member of the Audit Bureau of Circulations and the Associated Business Papers, Inc.

Three Schools of Textiles

As the end of 1945 approaches it must be realized that there will probably never be another time when donations can be made with so little actual cost to mill corporations.

There will probably never be another time when an investment in the future of the textile industry can be made with so little actual expenditure.

The high tax brackets, which now prevail and which in many cases mean that 95 per cent of a donation would otherwise go out as income taxes, 90 per cent in the form of Federal taxes and five per cent as state taxes, will disappear with the coming of 1946 and be replaced with somewhat lower levies upon incomes.

The ease with which mills have been able to sell any kind and any quality of textiles and the willingness of buyers to pay almost any price asked, has had a tendency to make textile manufacturers forget the hard and difficult years of the past, the long periods of low prices, often below cost of production, and the months or weeks when spindles and looms were idle because no orders could be obtained.

Many textile manufacturers have, because of the ease which goods can now be sold and profits realized, seemed to forget the days of 1930 to 1939, and earlier years.

Many also seem to forget that in the days when they were without orders or forced to take business at below cost, there were certain mills which were able to operate full time and to show moderate profits because their output was in demand.

Any man can operate a cotton mill now and can make a profit but for the depression periods which are certain to come, operating executives with special training are going to be needed.

Many mills now operating entirely upon cotton and appearing to think that they can continue to sell their present

output are due for a rude awakening and when they find it necessary to change to synthetic fabrics are going to seek the services of especially trained men.

Groups of far-sighted textile manufacturers have realized that in the days which are to come the textile industry will need well educated operating executives and a few years ago began to plan for schools of textiles to produce well trained young men.

The North Carolina Textile Foundation, Inc., was organized for the purpose of bringing to the School of Textiles at North Carolina State College the best teachers who could be found.

The J. E. Sirrine Textile Foundation was organized by South Carolina mill men and will give support to the School of Textiles at Clemson College.

The Educational Foundation of Georgia was organized and has plans for a well equipped and well staffed A. French Textile School at Georgia School of Technology.

The day is going to come when textile mills can no longer operate and sell their product, both good and bad, at profitable prices and then there will be such a demand for well trained operating executives that every graduate of one of the above named schools of textiles will find a job waiting for him.

Most textile mills have realized the importance of this movement for better textile education and have been liberal in their donations, but there are some who have not done their full part or made any contribution.

The requests of each of the foundations have been very moderate and all have been upon a pro rata basis.

If every mill will do its part and will make the donation requested the foundations will have sufficient funds to establish their programs of better textile education and will be able to continue that program during the depression years which are certain to come.

As we are almost at the end of the period of high income and excess profits taxes, we urge mills in each state to make a donation to the foundation which has been established in their area.

No donation will be excessive or burdensome and we feel that each mill should do its part.

We see these donations as investments in the future and believe that time will prove them to have been excellent investments.

Labor's Abuse of Power

Roger Babson in one of his recent statements makes the following significant statements relative to the present abuse of power by labor unions:

Apart from the abuse of power, labor is fast reaching a point where it will kill itself by overweight as did the big mastodons of old. Every group throughout history has been subject to Sir Isaac Newton's Law of Action and Reaction, commonly known as the Cycle. This is most simply illustrated in the case of prices and production. Prices are high because production is low; increased prices cause increased production; until finally prices break and they are back from where they started. This seems to be a fundamental law of nature.

The unreasonable wages which now are being demanded by certain groups will result in forcing the employers to install more new labor-saving machinery. A thousand men may, by holding a pistol up to their employer's head, force an unjustified 15 per cent raise in wages. But in such a case, the employer is forced to install

labor-saving machinery and get on with 850 men instead of 1,000. Hence, 150 men are thrown out.

If Congress does not rectify the present unfair labor situation we will have one big national strike when our homes will temporarily be cut off from all conveniences. As a hedge against that day, I am building in my yard a small house and stocking it with canned goods. I am driving a well for my water; am installing underground oil tanks with a good big wood pile; am building a chemical toilet and am insulating the small "hut" against heat and cold. In an emergency, we could continue to sleep in the bedrooms of my adjoining house, but the living, cooking and eating will be in this new little building!

It is difficult to believe that labor's abuse of power can go to the point that the precautions taken by Mr. Babson would be found necessary, but we do know that the racketeers who are now in control of organized labor are absolutely ruthless and will hesitate at nothing provided Congress does not enact curbs which will restrain them.

It does appear that Congress might enact some legislation which will make it impossible for the racketeers to refuse to allow trucks to enter New York without paying exorbitant fees to their organization.

Many congressmen will spend Christmas at home and for a few days, at least, be free of the pressure and threats of the lobby which organized labor keeps in Washington.

Citizens in all walks of life are becoming alarmed over labor's abuse of power and if they will but express their opinions to congressmen while they are home, some curbs may be established when Congress reassembles in January.

If nothing is done by Congress we may all wish that we had made some preparation against the day of a general strike during which labor racketeers take the entire country by the throat.

Is There Inflation?

We hear many people expressing fear of a period of inflation which is to come but it appears to us that inflation is already upon us.

Everybody seems to be buying everything which is offered for sale or which they can induce the holders to sell and the price which is charged seems to make no difference whatever.

Whether it is a shirt or a steam engine which is desired the almost invariable answer is that none are on hand and that it will be several months or possibly a year before delivery can be made.

If a man, no matter where he lives, is lucky enough to buy a house at about 50 per cent more than its former value, somebody comes around the next day and offers him a substantial certified check if he will turn over his purchase immediately.

If a man wishes to build a house, he can secure no bricks even at 50 per cent more than their pre-war price and when he asks for lumber the dealers laugh at him.

Every day there are reports of sales of large cotton mills at about \$30 per spindle but if those who sell were to set out to build another mill and could obtain delivery on machinery before 1948 they would probably find that the new mill would cost between \$90 and \$120 per spindle.

No one knows how far the present inflation is going or how long it will last.

The real estate boom in Florida some years ago was a tremendous thing and great profits were made on paper.

One day every piece of real estate bought could be sold at a profit but overnight the boom collapsed and the next day those who were caught with real estate upon their hands could find no person who would buy it at any price.

Soon after the Florida real estate boom there was a boom in cotton mill stocks and every share of stock which came upon the market was grabbed by some man or woman and sold at a fine profit the same or the next day.

One day everybody wished to buy cotton mill stocks without even looking at the financial statements but overnight there was a change and the next day nobody was interested in any mill stocks at any price.

It is easy to say that "history will repeat itself" and that overnight people will lose their interest in buying and that there will be a surplus of goods of all kinds with few buyers.

That appears logical until we think about the billions of accumulated cash and government bonds which are in the hands of the public, even people in the lower income brackets.

When a man purchases a shirt or a house the buying power of his dollars does not stop there because the man who has sold them has the buying power of those dollars and the money literally rolls through the channels of trade.

The American people now have the greatest buying power in all history and there are many things which they have done without during the years of the war and which they need.

During the war wives of soldiers and their children have been, in many cases, living with their parents but the returning soldier must build a home or have one built for him.

Furniture and cooking equipment and towels and bed sheets and many other articles must be secured for each home.

For four years the building and equipping of homes which would have progressed at a normal rate has ceased and now much of the lag must be made up and behind the need and desire for homes there is an accumulation of money and bonds.

On the one hand we see the lesson of the Florida real estate boom, the mill stock boom and many others and the crashes and disasters which followed and feel like issuing a warning.

On the other hand we see pockets and banks bulging with money and bonds and a public intent upon building and buying those things which were not available during the war but are now needed.

We are not economists and dare not try to say what is before us.

We do know that the period of inflation, about which people speak with fear, is to a large extent already upon us and it seems to be extending itself day by day.

Taxes In New Zealand

A very prominent citizen of Masterton, New Zealand, with whom our editor is personally acquainted, writes:

We have a government which believes in paying for the war by taxation to at least 50 per cent of the cost. Income tax amounts to 18 shillings in the pound on higher incomes, which means that a man with an income of 10,000 pounds has to pay 9,000 pounds income tax.

Those in America who think that our taxes are high should talk to citizens of New Zealand, England and others of our allies.

Classified Department

Southern Standard Mill Supply Co.

NEW, REBUILT and USED TEXTILE MACHINERY and SUPPLIES

512 W. Fourth Street
Charlotte, N. C.
Phone 3-8841

1064-90 Main St., Pawtucket, R. I.

N. Y. Office: 1022 Empire State Bldg.

C. E. LUTTRELL & COMPANY

Textile Machinery and Supplies

GREENVILLE, SOUTH CAROLINA

Wanted

30 - Cotton Cards, 45" Wide

JAMES E. FITZGERALD
Textile Machinery

10 PURCHASE STREET

FALL RIVER, MASS.

WANTED

Mop Yarns and Slasher Waste

CHRISTIE MOP & BROOM WORKS + Knoxville 16, Tenn.

FOR SALE

FOLDING MACHINE, 36" FOLDRITE FOLDER, ALL LATEST FEATURES. 220 VOLTS, 60 CYCLES, 3-PHASE, ¾ H. P. MOTOR. Can be operated by any type ¾ H. P. motor.

Machine can be adjusted to produce any desired style of fold in towels, pillow cases, diapers, etc. Demonstration on request.

DONCASTER COLLAR & SHIRT COMPANY
RUTHERFORDTON, N. C.

WE ARE AGENTS

For These Lines of
Textile Specialties

"HERON" and Super-Superior Check Straps.
"GBC" Sheepskins.
NEUMANN Calfskins.
NOONE'S Roller, Slasher and Clearer Cloths.
"GBC" Special Roller Cloths.
HOLT'S Roller Glue.
"GBC" Belt Cement
BILTRITE Canvas Lug Straps.
DAYTON "Thorobred" Loom Supplies.
DAYTON V-Belts and Pulleys.



GREENVILLE BELTING CO.

Manufacturers of Leather Belting

Day 2218 — Phones — Nite 3916

MILL ENGINEERING—Registered Professional Engineer, formerly with Robert & Co., wants job making mill construction plans; fee or salary basis. Write "Box S-D," care Textile Bulletin.

YOUNG MAN now employed as Overseer of Weaving in large mill desires to make change. Thoroughly experienced on broad, narrow, and box looms. Best references. Not interested in temporary job. Address "Box N-76," care Textile Bulletin.

WANTED—Position as Barber-Colman Spooler and Warper man; 14 years' experience; married, three children. Now employed but wish to make change. Experienced with cotton and rayon both. Good references. Write "B-S," care Textile Bulletin.

WANTED—Position as sales representative for a good textile supply company, by a practical mill man with some technical education and also some sales experience in the textile field in the South. Address "Box 1141," care Textile Bulletin.

WANTED—Position as cloth room overseer, experienced on all kinds of cotton goods. 34 years as overseer of cloth rooms. Now employed, but desire a change. Good references. Write "Box 159," care Textile Bulletin.

POSITION WANTED—Overseer spinning with progressive mill. 14 years' experience. A-1 references. 43 years old. Production quality getter at low cost. Available Jan. 15, 1946. Address "P. O. G.," care Textile Bulletin.

WANTED—Classing or buying position with cotton mill or shipper. Age 41, married, 20 years' experience buying and classing cotton. All growths. Now employed by shipper but desire change. "Box 4510," care Textile Bulletin.

WANTED—Job as second hand or overhauler in card room. 12 years' experience. A-1 references. 42 years of age. Sober and good manager of help. Will accept job traveling, erecting or overhauling. Address "Box 152," Maiden, N. C.

LET US OVERCOME

the Rust, Corrosion, Congestion and Fungi problems in your Air and Humidifying Systems.

ALLADDIN LABORATORIES, INC.
68 William Street New York, N. Y.
North and South Carolina Representative:
Joe W. Baldwin.

PAUL B. EATON

Patent Attorney

1208 Johnston Bldg., Charlotte, N. C.
514 Munsey Bldg., Washington, D. C.

Former Member Examining Corps
U. S. Patent Office

Index to Advertisers

	Page		Page
Acme Machine & Tool Co.	12	Henley Paper Co.	61
Acme Steel Co.	65	Houghton & Co., E. F.	31
Alladdin Laboratories, Inc.	48	Houghton Wool Co.	45
American Cyanamid & Chemical Corp.	28	Howard Bros. Mfg. Co.	23
American Paper Tube Co.	83	Industrial Cooling & Moistening Co.	75
Ashworth Bros.	87	Iselin-Jefferson Co.	10
Bahnson Co., The	16	Jarrett & Co., Cecil H.	79
Bally & Co., Joshua L.	58	Johnson Chemical Co.	72
Barber-Colman Co.	8	Keever Starch Co.	52
Barnes Textile Associates	79	Keystone Belting Co.	72
Best & Co., Edward H.	70	Laurel Soap Mfg. Co., Inc.	71
Borne, Scrymser Co.	43	Lawrence Leather Co., A. C.	9
Burkart-Schier Chemical Co.	73, 75, 77 and 79	Luttrell & Co., C. E.	48
Butterworth & Sons Co., W. H.	41	Maguire, John P.	63
Carolina Refractories Co.	77	Manhattan Rubber Co.	68
Carter Traveler Co.	60	Mathieson Alkali Works	19
Centery Stearic Acid Candle Works, Inc.	66	Mead Corp., The	62
Chapman Electric Neutralizer Co.	35	Merrrow Machine Co., The	77
Charlotte Chemical Laboratories, Inc.	75	National Aniline & Chemical Co.	17
Charlotte Leather Belting Co.	2	National Ring Traveler Co.	51
Ciba Co., Inc.	26	Neisler Mills	58
Clinton Co.	45	New England Bobbin & Shuttle Co.	45
Cloverleaf Mfg. Co.	73	Noone & Co., Wm. R.	56
Cole Mfg. Co., R. D.	71	Onyx Oil & Chemical Co.	3
Curran & Barry	58	Page Belting Co.	75
Dary Ring Traveler Co.	72	Parks-Cramer Co.	51
Denison Mfg. Co.	72	Peach & Co., D. W.	59
Dixon Lubricating Saddle Co.	58	Perick & Ford, Ltd.	70
Draper Corporation	7	Piedmont Processing Co.	75
Dunning & Boschert Press Co.	73	Provident Life & Accident Ins. Co.	Front Cover
Eaton, Paul B.	48	Ray Chemical Co.	77
Emmons Loom Harness Co.	55	Raymond Service, Inc., Chas. P.	49
Foster Machine Co.	6	Rice Dobby Chain Co.	68
Foxboro Co., The	77	Rohm & Haas Co.	24
Franklin Process Co.	37	Rose & Co., E. F.	75
Gastonia Roller, Flyer & Spindle Co.	79	Roy & Son Co., B. S.	79
General Dyestuff Corp.	11		
Greenville Belting Co.	48		

	Page
Saco-Lowell Shops	14
Scott Testers, Inc.	57
Seydel-Woolley & Co.	43
Simmons Plating Works	69
Sinclair Refining Co.	20
Sirrine & Co., J. E.	71
Smith, Drum & Co.	80
Solvay Sales Corp.	64
Southern Radio Corp.	15
Southern Spindle & Flyer Co.	66
Southern Standard Mill Supply Co.	48
Stein, Hall & Co.	51
Sterling Ring Traveler Co.	75
Stevens & Co., Inc., J. P.	58
Terrell Co., The	79
The Stanley Works	53
Tide Water Associated Oil Co.	4 and 5
U S Bobbin & Shuttle Co.	13
U. S. Ring Traveler Co.	59
Universal Winding Co.	25
Virginia Smelting Co.	12
Vogel Co., Joseph A.	64
Wallerstein Co., Inc.	62
Warwick Chemical Co.	Back Cover
Watson-Williams Mfg. Co.	77
Wellington, Sears Co.	58
Whitinsville Spinning Ring Co.	69
Wolf & Co., Jacques	33
Yancey Co., The	15

USED MACHINES WANTED—HIGHEST CASH PRICES PAID

- 1—D. E. Whifton Hand Feed Gear Cutter, with vise for cutting outside key ways.
1—Internal Key Seating Machine. Preferably a Davis No. 2.

FEAGINS MACHINE SHOP
P. O. Box 64, Enterprise, Ala.

For Sale

126—40" Model E Draper Looms, belt driven, equipped with 2, 3 and 4-harness cams, Roper let-off, 2 and 3-bank stop motions, 63 looms with drag rolls, spring tops. Good mechanical condition. Can be seen in operation to last week in January, then available 18 looms weekly.

LEWARD COTTON MILLS, Inc.
Worthville, N. C.

WANTED—SALESMAN-TECHNICIAN

To call on textile mills to sell and demonstrate chemical products. Must be familiar with manufacture and finishing of cotton and mixed goods. Prefer chemical or chemical engineering training or graduate of textile school. Salary would depend on qualifications and experience. State full particulars as to age, family status, education and experience.

Address "Box 1638,"
care Textile Bulletin.

WANTED

Newly organized Mill and Textile Supply Company, having adequate capital and experienced aggressive salesmen, with established contacts, desires connections representing reputable manufacturers in State of Alabama.

Communicate with Box 3555,
West End Station Birmingham, Ala.

WANTED

One Section Man and Fixer for Barber-Colman automatic warper and spooler. Good job with top pay.

Address "B. E. J.,"
care Textile Bulletin.

Wanted Maintenance Engineer

for 32,000-spindle cotton mill in South Carolina. Opportunity for advancement for the right man. State age, experience and education.

WRITE "COTTON MILL,"
CARE TEXTILE BULLETIN.

Attractive Positions Open in Southern Mills . . .

Superintendent waste utilization plant.
Superintendent mill synthetic yarn and weaving plant.
Office manager.
Sales and service men for cotton spinning, twisting and slashing equipment.
Textile school graduate with some mill experience.
Boss dyer cotton piece goods, yarn and raw stock.
Plant engineers and master mechanics.

Boss carders (cotton, for days and nights).
Hosiery, underwear and sweater mill superintendents, overseers cutting, finishing and knitting, also sewing, knitting, looping and seaming machine fixers.
Superintendent cotton yarn spinning, winding, twisting and converting plant.
Foremen winding colored cotton yarns.
Designer and assistant superintendent woolen mill. Also Southern men for positions in other sections.

Rayon weaving plant superintendents, one for United States and one for India.
Mechanical engineer for silk weaving plant.
Boss napper wool blankets.
Expert to take charge of development of synthetic yarn fabrics.

Charles P. Raymond Service, Inc.
294 Washington St. + Boston, Mass.
OVER 45 YEARS IN BUSINESS

We Invite Correspondence (Confidential) With Men Seeking New Positions and With Employers Seeking Men

MILL NEWS

BAMBERG, S. C.—E. Lasry Co. will take possession of Santee Mills, Inc., Jan. 1 as the result of a successful bid last month for the mill property. The plant is equipped with 15,328 spindles and 400 looms and produces narrow sheetings.

HUNTSVILLE, ALA.—Huntsville Mfg. Co. has been organized by M. Lowenstein & Sons, Inc., of New York City to take over the operations of Merrimack Mills, recently sold to the Lowenstein organization by Merrimack Mfg. Co. of Lowell, Mass. A. D. Elliott will remain as resident manager.

MARTINSVILLE, VA.—Martinsville Cotton Mill Co., Inc., has been sold by Chadwick-Hoskins Co. of Charlotte, N. C., to a New York City firm as yet unnamed. The plant manufactures print cloths and is equipped with 21,024 spindles and 500 looms.

ROCK HILL, S. C.—Celanese Corp. of America has announced plans for a \$10,000,000 acetate rayon yarn manufacturing plant between Rock Hill and nearby Fort Mill. A site of some 1,200 acres has been acquired and 2,500 workers will be employed when operations begin. The company now operates plants at Cumberland, Md., Narrows, Va., Staunton, Va., Bishop, Tex., Williamsport, Pa., Burlington, N. C., and Newark, N. J.

Carolinas Mills Get Safety Awards

On a note of excellence in safety and accident prevention, several Carolinas mills recently have been rewarded for their efforts in that direction.

Cramerton (N. C.) Mills, Inc., and American Yarn & Processing Co. of Mt. Holly, N. C., were presented U. S. Government awards for accident prevention in reduction of accidents of 40 per cent for the first six months of 1945.

Duchess Throwing Co. of Statesville, N. C., a branch of Burlington Mills Corp., was awarded the accident-prevention flag of Liberty Mutual Insurance Co. in recognition of the completion of 1,038,465 man-hours worked without a lost-time accident, during the period between March 1, 1941, and Oct. 1, 1945. Judson Mills of Greenville, S. C., also has received the flag as reward for effectively preventing injuries as well as for 2,481,752 man-hours worked without a lost-time accident between Feb. 5 and Sept. 1 this year.

Mathews Mill of Greenwood, S. C., has been awarded the Department of Labor's Certificate of Safety Achievement. Greenwood Cotton Mill also will receive a second Certificate of Safety Achievement.

COLUMBUS, N. C.—Operations at the recently organized Columbus Mills will begin soon, according to Superintendent Charles Ramsey. Machinery for the manufacture of narrow fabrics is now being installed, and 100 operatives will be employed.

DALLAS, TEX.—Dallas Cotton Mills Co. has been purchased by A. Horvath and associates of New York City. Mr. Horvath, new president of the company, has announced that new machinery would be installed and additional workers employed next year. Other officers of the 13,900-spindle and 346-loom industrial fabric plant are E. V. Horvath, vice-president, and G. A. Horvath, secretary-treasurer.

LEXINGTON, S. C.—Red Bank Mill, Inc., of Lexington has received a charter to manufacture cotton, rayon, wool and synthetic yarns, also to deal in cloth, piece goods, etc. The authorized capitalization is \$225,000. Officers are Nathan C. Helman, president-treasurer, and M. Henry Chernay, secretary-treasurer.

ROME, GA.—Jacob Ziskind of Fall River, Mass., has purchased a majority of stock in Anchor Duck Mills and will be president of a newly-elected board of directors. D. D. Towers, vice-president and general manager, will continue in that capacity. The plant produces industrial and specialty fabrics and is equipped with 24,480 spindles and 322 looms.

GASTONIA, N. C.—Waverly Braid Mills was destroyed almost completely by fire Dec. 11, and officials of the company have estimated the loss at between \$50,000 and \$60,000, partially covered by insurance. No prediction as to when operations in the shoe string manufacturing plant could be made. New machinery will have to be procured and a new building erected.

MORRISTOWN, TENN.—A \$1,500,000 nylon processing plant will be constructed at Morristown next spring by Belding-Heminway Co. of New York City. Approximately 250 workers will be employed. The new mill will be used primarily for throwing nylon and synthetic yarns for the company's plants in Bedford, Va., and Putnam, Conn.

GASTONIA, N. C.—Contract for the construction of the first four of 20 proposed factory buildings in East Gastonia by the Gastonia Industrial Realty Corp., a building syndicate formed to provide floor space and accommodations for new industries, was recently awarded. Plans call for the erection of 20 factory buildings each to measure 52 by 240 feet. Construction is to be entirely fireproof, with sprinkling and insulated roofs and suitable for installation of air-conditioning. It is hoped that the first four buildings can be ready for occupancy by May 1, 1946. Plans are to locate in these buildings, as far as possible, industries allied to the local textile industry so that fabrics whose processing is begun here might be finished in local plants.

WENTWORTH

Double Duty



Reg. U. S. Pat. Off.

Travelers

HICKS — AMERICAN — WILSON — U. S. STANDARD

Last Longer, Make Stronger Yarn,
Run Clear, preserve the SPINNING
RING. The greatest improvement
entering the spinning room since the
advent of the HIGH SPEED SPINDLE

NATIONAL — ETARTNEP FINISH
A NEW CHEMICAL TREATMENT

Manufactured only by the

NATIONAL RING TRAVELER CO.

PAWTUCKET, R. I.

131 W. First St., Charlotte, N. C.

L. EVERETT TAYLOR, So. Agent

79 YEARS

of service to the

TEXTILE INDUSTRY

We have supplied starches, gums and dextrines to the Textile Industry since 1866.

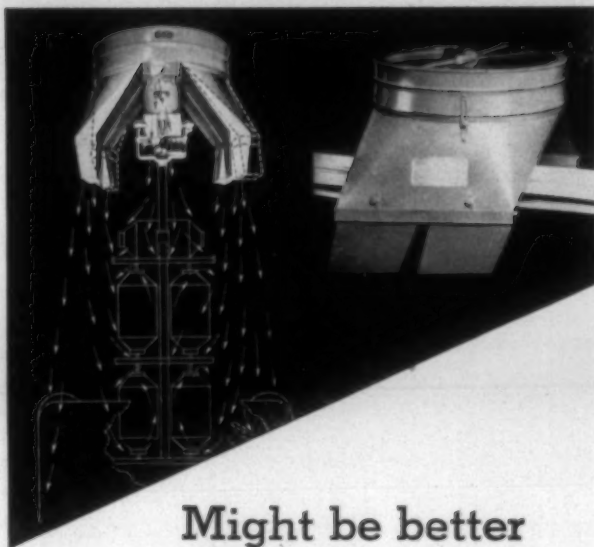
This long experience helped to give us the know-how in solving many war-time sizing, finishing and printing problems, and in meeting critical shortages by developing satisfactory substitutes.

Call on us for help in solving your postwar problems. Our Textile Laboratories and Field Staff are at your service.

STEIN  **HALL**

285 Madison Avenue
1011 Johnston Bldg.

New York 17, N. Y.
Charlotte 2, N. C.



Might be better to Clean by Hand

Rigged with ParksTurbo Traveling Cleaners, frames are blown off every three or four minutes.

Lint and fly do not get a chance
to be spun into the yarn. They
are shooed away.

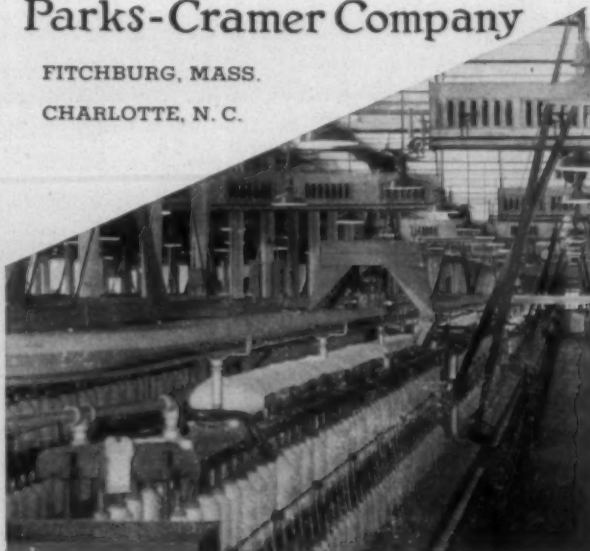
Hand cleaning, done as often or as regularly, might be better. But what spinner would want to fan a frame (not to mention five or six) fifteen or twenty times an hour? Or who would want her to?

ParksTurbo Traveling Cleaners take the drudgery out of spinners' work—and earn their keep besides.

Parks-Cramer Company

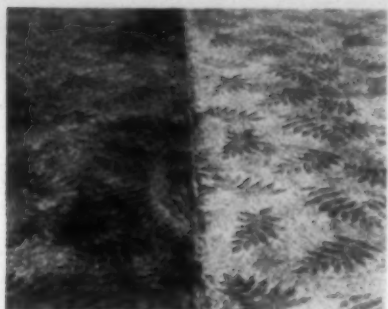
FITCHBURG, MASS.

CHARLOTTE, N. C.



Mathieson Develops New Carpet Cleaning Powder

A new detergent for location cleaning of wall-to-wall carpeting has been announced by Mathieson Alkali Works. The product is to be marketed under the trade name "Neutrotone." The new cleanser is a powder with high lathering properties, although it is said to contain no soap. It is used in solution and applied by means of a rotary brush. Released dirt and soiled deter-



gent are then removed with a wet vacuum. It is claimed that the new cleanser not only removes ordinary types of soil but also disinfects, deodorizes and demoths, without leaving a residue or harming texture, color or tensile

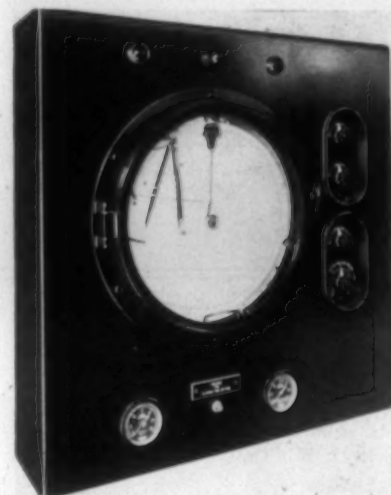
strength. The accompanying illustration shows a section of carpeting before and after cleaning with Neutrotone.

CycleLog Controller Unit For Batch-Type Processes

For batch-type processes and other operations where rate of temperature increase or decrease must be controlled, as well as the actual processing temperature and duration, the Foxboro Co. of Foxboro, Mass., has developed the "CycleLog Controller" for measurement and control (see cut). The name "CycleLog" was adopted as expressing the instrument's unique function, in controlling and recording all the steps of a complete process cycle. No time-cams or supplementary instruments are employed. CycleLog control is completely automatic, according to whatever schedule is predetermined by adjustments of four setting knobs on the instrument panel.

In batch dyeing, for example, the CycleLog Controller should bring the bath temperature up from any starting point to the desired holding point, at any desired rate of rise from 1 to 8°

F. per minute. Another function is to hold the bath at exactly the correct period of time, shut off the heat supply, and signal the operator that the



cycle has been completed. By reference to the instrument chart and its notations, any cycle can be exactly duplicated as desired, in any similar plant and regardless of season. While other control instruments have provided temperature control, with the deferred action and elapsed-time features, the CycleLog unit combines these with the new rate of rise control.

Kidde Tension and Density Control Device Is Offered

The Kidde tension and density control, a new device for the textile industry especially adapted for winding yarns where tension and package density is important, has been announced by Walter Kidde & Co., Inc. Now in production, it is soon to be available. Based on an entirely new principle it is described as having numerous applications in textile manufacturing. The device is a precision winding machine which enables the operator to draw yarn from any over-end supply and at decreased speeds from a revolving supply. Specifically the device is especially adapted to winding dye tubes, elastic yarns, and any other yarns in which tension on the yarn and density of the package is of any importance.

There are two parts to this machine (see cut). The upper assembly is essentially a device to feed the yarn to the package being wound at a predetermined tension. Tension is entirely independent of the supply package and

VICTOR MILL STARCH

Always A Winner!

Distributed by

CLAUDE B. ILER
Southern Manager
Greenville, South Carolina

L. J. CASTILE
Charlotte 3, North Carolina

F. M. WALLACE
Birmingham 9, Alabama

C. C. SWITZER
Greenville, South Carolina

**THE KEEVER
STARCH CO.**
Columbus 15, Ohio

is achieved by the setting of a spring. From this point on regardless of the yarn speed, within reasonable limits, tension remains the same as the package is built. This is achieved by a

wheel is used to turn the clock work for precise adjustment. The manufacturer states that the combined mechanisms enable a package of any reasonable density to be wound; they are especially valuable to wind a package with a uniform yet light tension and density.

Northrop Gaines Develops Materials-Handling Devices

Now in full production on a new type of "air-weight" materials-handling equipment, Northrop Gaines, Inc., wholly owned subsidiary of

Northrop Aircraft Inc., is using airplane fabricating techniques in constructing hand trucks and industrial wheels of light metals. First item ready for the market will be industrial wheels, cast solidly of aluminum and with hand rubber tires molded firmly on the wheels by a new process. These wheels, built in six, eight, ten and 12-inch diameters, are designed for use on hand trucks, dollies and all rollable industrial equipment. Although they weigh as little as three pounds, the Northrop Gaines wheels are built to carry 40 per cent more



simple leverage arrangement working against the spring in which the control arm at the top of the mechanism moves the yarn guide-bar to change the position in which the yarn is run through the feed-wheels. As tension tends to increase, the guide bar moves the thread away from the center of the feed-wheels to where the peripheral speed is greater until the predetermined tension is achieved. When tension tends to be too light just the opposite happens. The feed wheels are positively driven, and there is a throw-out mechanism for use in threading the machine as well as a simple disk tension to control the yarn as it is fed into the feed wheels. Should the thread break, the control arm hits the wire near the extreme top of the mechanism which actuates the regular machine stop motion.

The density control mechanism mounted below the package is essentially an escape arrangement whereby, as pressure on the package tends to increase, the pressure bar is permitted to fall away from the package very slightly through an escapement. The amount of pressure is governed by small weights operating against the friction on the pressure bar. As friction increases on the pressure bar, the bar turns slightly, releasing a ratchet which permits the clock mechanism to run and the pressure back to move very slightly. Upon moving the back away for any reason, it is returned to its approximate position by mere pressure of the hand. Then a rubber covered



STEEL-STRAPPED for *Strength* without bulk!

Many a packing routine is shortened and shipping safety gained by the Stanley Steel Strapping System. Modern practice proves that lighter crates and cartons banded with steel save time and materials in place of bulkier wooden cases.

Whether you use reel, bale, case,

crate or carton to ship by land, sea or air — Stanley Steel Strapping will give your packages, dependable, double-strength protection. The Stanley System includes tools, reels and accessories for every application. The Stanley Works, Steel Strapping Div., New Britain, Conn.

STANLEY

STEEL STRAPPING AND CAR BANDING SYSTEMS
MEET ALL FEDERAL STRAPPING SPECIFICATIONS

weight than any wheel of equivalent size, and are equipped with Timken tapered bearings.

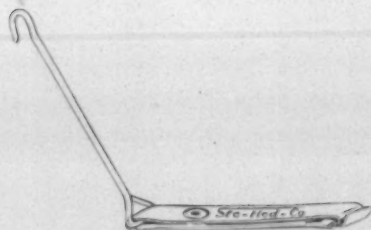
Northrop Gaines also is in production on a line of hand trucks which, according to President Frank Gaines, will "take the back-break out of materials moving." The hand trucks are mighty featherweights, with a frame cast in one solid piece of aluminum. Smallest of three sizes weighs only 36 pounds, yet has been stress-tested under a 5,000-pound load (see cut).



These hand trucks are of the type used in mills, factories and warehouses for moving heavy loads such as boxes, trucks, barrels or raw stocks. Large-size trucks have special clips on the side bars which permit the operator to handle a cargo without danger of rolling it off the truck accidentally.

Steel Heddle Co. Presents Strap for Short Selvages

One of the many new products invented and engineered during the war by the Steel Heddle Mfg. Co., with plants in Philadelphia, Pa., Greenville, S. C., Atlanta, Ga., and Montreal, Canada, is an all-steel strap for short selvages (see cut). It is approximately



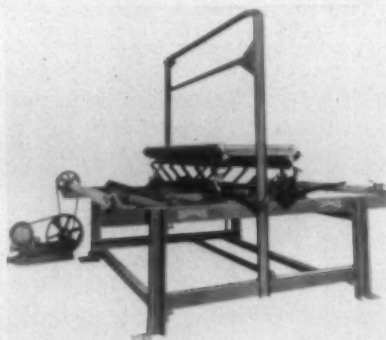
nine inches long, including the hook, hanger and U hook sections, the hanger section being about three inches long. The end of the hook part, which is attached to the hanger section, is

triangular in shape and of a width that permits the hook to receive the entire width of the strap, giving maximum bearing and support.

At the coupling end there is a tongue provided to arrest the movement of the U hook while in motion or being attached or detached, preventing the damaging of the hanger section. A rivet in the center of the hanger section at the hook end holds the two spring sections of the hanger firmly together. It is made of one piece tempered steel, designed to withstand terrific vibration or usage.

Carbomatic Singeing Unit Hailed As Finest Devised

Hailed by those who have seen its operation at a demonstration in New York recently as the finest singeing unit ever devised, the carbomatic singer, a product of the Carbomatic Corp. of New York City, is now available to the textile industry. The greatest "bugaboo" in singeing operations has been the necessity of passing materials through the singer several times in order to do a complete singeing job, at a great loss in man hours and expense in operating costs. With the new carbomatic singer (see cut) one pass is all that



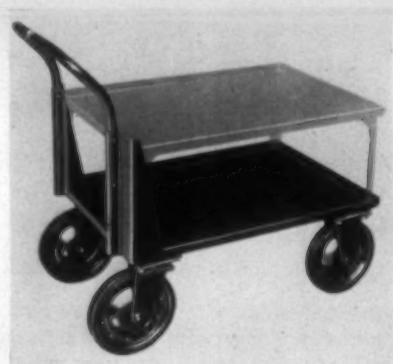
is required in most instances, and both sides of the cloth or material are processed simultaneously.

Carbomatic singers are designed to solve individual problems, governed by actual requirements that must be met by each mill, as to width of materials, their type and weight, etc. These units are so constructed as to make possible the processing of several widths of material on the same unit, with necessary controls incorporated as an integral part of same. Variable speed control is also made possible, enabling the singeing of lighter or heavier goods at the proper speeds. These new singers

are fully automatic. Flame is automatically shut off if the machine is stopped for any reason.

Drinkwater Utility Truck Embraces Many New Features

Flexibility is the keynote of the new Drinkwater patented all-purpose utility truck, designed for quick and easy handling of parts, equipment and supplies in industrial plants. The manufacturer states that



important features of the new Drinkwater utility truck are short wheel-base making for easy maneuverability, sturdy all-steel construction assuring years of service even with rough and continuous use, plus unusual flexibility providing applications for a variety of jobs. This new unit lends itself to uses such as materials handling, parts assembly, production line, shipping room, stock storage and dispatch of parts and materials.

Steel bed and platform of the Drinkwater utility truck are seamless one-piece construction. All corners are rounded, edges reinforced. Substantial corner guards give handle maximum rigidity and protect corners of load. A reinforced steel channel runs beneath the bed of the truck giving it a tremendous "falling weight." The manufacturer claims that 75 to 100 pound weights can be dropped on the bed of this truck without impairing its life or durability. The platform of the truck is removable and each truck can carry from one to four platforms. The bed or base of the truck is 23-1/8 inches wide and 33-3/8 inches long. Height of truck from floor to handle is 36 inches. The four steel disk wheels are ball bearing and can be supplied in either eight inch or ten inch sizes with rubber tires or ten inch with plastic tired wheels.

World Rayon Situation Is Pictured

Total November rayon shipments at 66,900,000 pounds declined two per cent from the October level, states *Rayon Organon*, published by the Textile Economics Bureau, Inc. This drop occurred because of the fewer working days in November. The total November deliveries included 51,900,000 pounds of filament yarn (37,700,000 pounds of viscose and cupra and 14,200,000 pounds of acetate) and 15,000,000 pounds of staple fiber (11,600,000 pounds of viscose and 3,400,000 pounds of acetate). Stocks remain essentially unchanged at a total of 11,100,000 pounds.

World rayon production in 1944 totaled 2,156,540,000 pounds, of which 1,039,630,000 pounds were filament yarn and 1,116,910,000 pounds were staple fiber, states the *Organon*. A marked upward trend in rayon production occurred during the early war period, with output reaching a peak of 2,759,105,000 pounds in 1941. During this period Germany, Italy and dominated European countries strove feverishly to minimize their dependency on imported cotton, wool and other natural fibers by expanding the production of rayon, especially rayon staple fiber. However, from 1942 to 1944 world rayon output declined as the result of growing raw material and manpower shortages as well as Allied bombing and sabotage of the Axis plants.

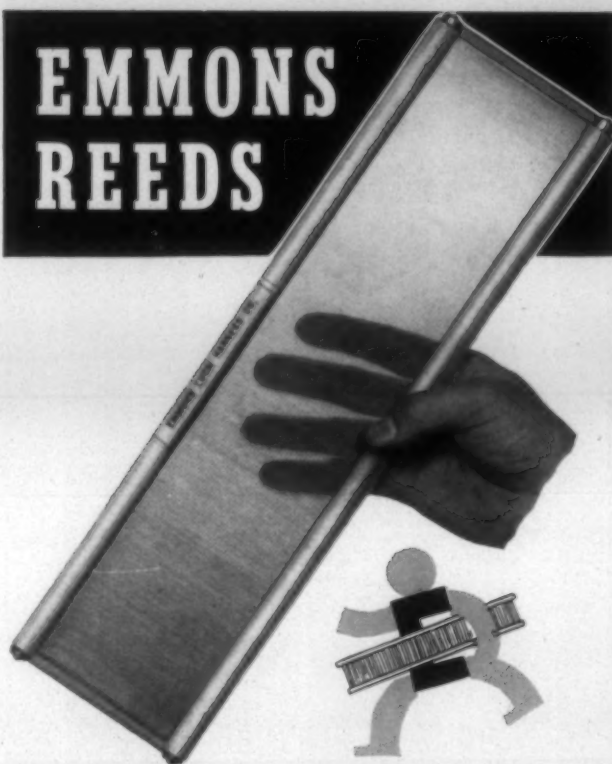
Although Japanese rayon production reached a record level in 1937, output thereafter declined and by 1944 Japanese rayon production was down to less than one quarter of the peak 1937 output. The development of critical raw material shortages and wholesale destruction of Japanese shipping during the war years were the chief factors contributing to this decline.

As contrasted with rayon's war record in Japan and Europe, rayon producing countries in North and South America during these years materially expanded their production above peacetime levels. Increased consumer demand, large military requirements, replacement of silk and nylon by rayon for civilian uses in the United States, and decreased supplies of rayon yarn and fabric available for export to South American countries were the principal reasons for these increases in rayon production. Although the increased production in the Western Hemisphere was large, it was not enough to offset the decline in rayon production in the rest of the world. In 1944 the United States was the world's largest rayon filament producer, making 53 per cent of the world output, as well as the second largest rayon staple fiber producer, with 15 per cent of the total.

As a result of the decline in 1944 world rayon output, cotton's relative position improved from 71 to 73 per cent of the world production of cotton, wool, rayon and silk, while rayon dropped from 15 to 13 per cent of the total. Wool remained at 14 per cent and silk production was nominal. World output of the four fibers declined six per cent from 17,933,000,000 pounds in 1943 to 16,836,000,000 pounds in 1944.

The 20th anniversary issue of the *Textile Apparel Analysis* and a brochure outlining the aims and organization of the International Statistical Bureau, Inc., have been issued by the bureau, located at 350 Fifth Avenue, New York 11, N. Y. The *Textile Apparel Analysis* lists, among other things, civilian market prospects, textile fiber and fabric prices, retail sales trends and summaries of the prevailing situations of yarns and fabrics.

EMMONS REEDS



PROMPT DELIVERIES

to your specifications

Emmons Reeds (pitch-band or all-metal type) are custom-made to your specifications, for next day delivery. Accuracy of air space and of dent thickness is within .01 inch and .001 inch respectively. Dents are super-smooth and air space can be up to 70% without loss of rigidity.

CHARLOTTE ADDRESS:

Post Office Box 2036 -:- Telephone: 3-7503

OTHER EMMONS PRODUCTS
STOCKED IN CHARLOTTE—
FLAT HEDDLES • HEDDLE
BAR STOCK • HEDDLE FRAME
REPAIR PARTS



EMMONS

Loom Harness Company

LAWRENCE, MASS., CHARLOTTE, N.C.

WILLIAM R. NOONE & CO.

A. ERLAND GOYETTE, President
ARNOLD T. MALONE, Treasurer

105 Washington St.

Boston, Massachusetts



Established 1831

NOONE'S Standard Slasher Cloths

Ask for NOONE'S SLASHER CLOTHS by name or style number.

Long experience in manufacturing Slasher Cloths and continuous experimenting have enabled us to produce several types of Slasher Cloth, each especially constructed to give best results on the particular kind of yarn to be sized.

The proper Slasher Cloth for each type of yarn means properly sized warps, less loom stops, easier weaving, more and better production, and lower cost. We can supply you the right cloth for your particular work. On request, we will have our representative call and discuss Slasher Cloths with you.

We are the oldest manufacturers of Slasher Cloth in America. Our experience enables us to build a Slasher Cloth that will meet your most particular demand. Use NOONE'S SLASHER CLOTHS and be convinced.

Sole Agents For

The Joseph Noone's Sons Co.

Peterborough

New Hampshire

Use

NOONE'S ROLLER CLOTHS
NOONE'S SLASHER CLOTHS
NOONE'S CLEARER CLOTHS

Housing Being Arranged for Greenville Show

Final plans for the 15th Southern Textile Exposition are being completed by the management of Textile Hall Corp. at Greenville, S. C. The show will open April 8, 1946, and continue for one week.

The management has authorized the following statement: "The approaching exposition will be one of the largest in our history. We have more applications for space than ever before. Every available foot on our three floors and in the annexes will be occupied. The exhibitors include most of those who were present in 1941, and others who have not hitherto participated. The displays will include a wide variety of standard machinery, equipment and many things which are new and novel."

Competent committees will provide housing facilities. One will be composed of textile executives, and is being set up to consider applications of exhibitors for quarters at local hotels. They will consider applications and make recommendations, in the nature of requests to the hotel managers, for equitable assignments during show week. However, the managers will make the final decisions. The committee will only make suggestions.

The second committee has been appointed by the Greenville Chamber of Commerce to assist in a canvass of private homes, in order to list all available guest rooms for the accommodation of visitors. This committee will urge citizens to place their spare rooms at the disposal of the executives and other employees of the textile plants who are expected to visit the show. A third committee will employ a secretary, who will have general charge of all housing arrangements. Requests for rooms will be filed and acknowledged as soon as quarters are obtained. Inquiries should be addressed to "Rooms Committee, care of Textile Hall Corp."

Formal invitations to attend the exposition will be extended to various associations. Among them are the Cotton-Textile Institute, the Textile Foundation, the American Cotton Manufacturers Association, the American Society of Mechanical Engineers, the National Association of Cotton Manufacturers, the Southern Textile Association and American Association of Textile Chemists and Colorists.

Need for New Apparel Program Described

The need for a low-cost apparel program for the first quarter of 1946 was stressed Dec. 12 by officials of the textile division of the Civilian Production Administration at a meeting of the CPA rayon weavers industry advisory committee. The meeting was the first of a series scheduled to be held with textile producers and finishers and apparel manufacturers in order to obtain the views of industry representatives on proposed procedures for administering a low-cost apparel program in the next quarter.

Herbert Rose, director of the textile division, explained to the rayon weavers group that establishment of a low-cost apparel program for the first quarter of next year was contingent upon extension of the Second War Powers Act. Members of the committee were told that a total of approximately 95,000,000 yards of rayon fabric out of the 139,000,000 yards of this fabric that were authorized for the low-cost clothing program for the current quarter have thus far been accepted for delivery under CC ratings.

It was explained that in order to speed completion of

acceptance of the balance of the authorized CC rated orders, the Civilian Production Administration is furnishing apparel manufacturers with the names of fabric suppliers who, according to their reports to CPA, appear to be capable of accepting additional orders of this type. The advisory committee discussed methods of improving channeling procedures to insure more prompt acceptance of rated orders for fabric in the program tentatively planned for the next quarter. The committee informed William F. Dabney, government presiding officer at the meeting, that it would submit its recommendations on the proposed low-cost apparel program in the near future.

A change in the provision governing pricing of "similar" and "comparable" woolen and worsted civilian apparel fabrics was announced recently by the Office of Price Administration. It became effective Dec. 17. The change provides that "comparable" and "similar" fabrics need not belong to the same classification as the base period fabrics on which ceilings are based. Fabrics are classified according to the season for which they are sold, and the type of dyeing. The seasonal requirement, however, is not a necessary limitation on selection of a fabric for comparison. It may result, besides, in two prices for "comparable" fabrics when they are sold for two different seasons. The action continues the requirement that the base period fabric must be of the same dye-type as the fabric being priced.

Arlington Mills Issues Textile Training Material

Manufacture of worsted yarns and fabrics from fleece to the finished product is described and illustrated in a new series of training material issued by Arlington Mills, Lawrence, Mass. The illustrations complement detailed studies of the important steps in the process. Accompanying the book, *Naphthalated Wool Worsteds, from Fleece to Fabric*, is a wall chart for instruction purposes, supplementing the text and reproducing the illustrations in larger size for use in training classes. Following the text in the book, the chart describes the properties of wool, illustrates the difference between wools and worsteds, and describes the processes through the various stages of cleansing, carding, combing, spinning, weaving, dyeing and finishing. Arlington Mills has announced that both book and chart are being made available to home economics departments of schools and colleges for their textile classes.

Ordnance Chief Praises Proctor & Schwartz

W. M. Schwartz, president of Proctor & Schwartz, Inc., of Philadelphia, Pa., is in receipt of a letter from Lieut.-Gen. L. H. Campbell, Jr., chief of ordnance, War Department, expressing the chief's appreciation of the production record achieved and maintained during wartime by Proctor & Schwartz. The chief of ordnance asked Mr. Schwartz to convey "to your people my congratulations and sincere thanks for the job which you together did which helped us to accomplish our task."

Dexter Chemical Corp. has issued a reprint of an article by Sidney Edelstein, the corporation's technical director, entitled "New Developments in Permanent Cellulose Finishes." Copies are available upon request to Dexter Chemical Corp., 819 Edgewater Road, New York 59, N. Y.

**If you own a Scott Tester,
CUT OUT THIS DATA SHEET,
No. 1 of a series, and
pass it along to your
maintenance man.**

MAINTENANCE DATA SHEET NO. 1

CALIBRATION OF SCOTT TESTERS

The recording head of an inclinable balance Scott Tester is in reality a weighing scale. However, it works in one direction only, so that it cannot balance back and settle into position if the weight is dropped or otherwise applied too abruptly.

To calibrate, have available a weight of known amount. Balance the machine by allowing the pendulum lever to swing to its normal position, dead center, and adjust the pointer to zero on the dial. Attach the known weight to the upper clamp, which is connected to the chain of the recording head. (In computing the amount of the known weight, include the weight of all apparatus used to attach it.)

Allow the weight to exert its force by lowering gradually by hand. Do not drop it, but do not lower too slowly. Use the speed at which stress is applied in an actual test. The pointer should register upon the dial the exact amount of the known weight plus the attaching apparatus.

The pawls must be in the same position on the quadrant racks as in actual testing. The weight must be attached without binding or friction that would prevent the full force registering on the dial. The weight may be a pail of water, a bolt of cloth, a roll of paper, sash weights, etc. Whatever the weight, it **MUST** be accurately weighed.

Every Scott Tester is fully tested and calibrated at the factory, therefore, it is safe to assume that accuracy at any one point of the dial indicates a correct machine at all points.

The many Scott Testers supply the needs of testing textiles, rubber, wire, paper, etc., up to 1 ton tensile.

**REQUEST "CATALOG &
DATA BOOK NO. 45"**



SCOTT TESTERS, INC.

115 Blackstone Street + Providence, R. I.

SELLING AGENTS FOR SOUTHERN COTTON GOODS

CURRAN & BARRY

320 BROADWAY
NEW YORK, N. Y.

WELLINGTON SEARS CO.

65 WORTH STREET NEW YORK

REPRESENTING 18 MILLS—MERCHANDISING 25,000 FABRICS

Industrial Fabrics — Garment Fabrics
Towels and Toweling — Drapery and Upholstery
Fine Cottons — Rayon

BRANCHES

BOSTON ATLANTA ST. LOUIS DETROIT SAN FRANCISCO
PHILADELPHIA CHICAGO NEW ORLEANS LOS ANGELES

Merchandising

Domestic

Export

JOSHUA L. BAILY & CO.

40 WORTH STREET NEW YORK

NEISLER MILLS COMPANY, Inc.

Selling Agents

40 WORTH STREET, NEW YORK

BOSTON CHICAGO LOS ANGELES SAN FRANCISCO



Dixon's Patent Reversible and Locking in Back Saddle with New Oiling Device three Saddles in one, also Dixon's Patent Round Head Stirrup.



Send for samples

Dixon Lubricating Saddle Co., Bristol, R. I.

Cotton Goods Market

Now that the end of the fourth quarter is near at hand, many Worth Street quarters are starting to think about the M-317A for the first period of 1946, thus adding still another cause for the generally tight supply picture where cottons are concerned. Reports that this order might be issued before the start of next year are generally discounted by the market, it being pointed out that this has never been the case.

The Civilian Production Administration said last month the set-aside restrictions governing the delivery of the cotton fabrics listed in Supplementary Order M-317A take precedence over certain rated orders. This was expressed in Interpretation 2 to M-317A, which explains that for those fabrics for which delivery restrictions are provided in the order, producers must first fill their set-aside obligations. They are only required to accept AAA, MM and CC rated orders to the extent of their production that is not earmarked to meet specific set-asides.

These set-asides were established to insure that certain percentages of the production of fabrics that are in short supply would be available to meet essential domestic and export needs. The provision that producers of fabrics listed in M-317A need only accept rated orders in the amount of the production that is left after the set-aside applies to orders for material for uses other than those for which the fabric was set aside. Thus, the provision does not apply to rated orders that come within the set-aside restrictions.

Sentiment in Washington circles is strong for a larger set-aside for export, a merchant points out, the feeling being that this is the only way in which these nations can secure the goods they need so badly. The inability of foreign buyers to get rayon in any yardages is pointed to as a good example of what would happen if the cottons set-aside was dropped. The rayon set-aside was eliminated some time ago.

Mills making goods classified as minor items have been waiting for new prices from the OPA for over six months now, market circles say, with several promises as to the date of issuance made but not kept by the price agency.

An intention to resume selling minor items in the gray state, should OPA come through with a fair ceiling price, has been reported by one Worth Street house. The mill in question has been forced to sell these goods finished as a last resort in order to show some sort of profit under existing ceilings, it is pointed out, and if the pricing agency allows a reasonable margin of profit the finishing operations on these fabrics will be dropped.

This mill is basically not a finished goods unit, it claims. It has never been really equipped for finishing operations and feels that its place is not in that field.

J. P. STEVENS & CO., Inc.

fabrics for diversified uses

1410 BROADWAY 44 LEONARD STREET

EMPIRE STATE BUILDING

NEW YORK

Cotton Yarns Market

With the end of the fourth quarter just several days away, cotton yarn trade leaders look for the month of December to set a new low in mill output. Reasons given for this expectation are that the final month of 1945 will see numerous "days off" for spinning establishment employees, with the Christmas holidays taking a large cut out of the working week. In addition to legitimate holidays, an upsweep in absenteeism is foreseen in the week between the Christmas shutdown and the New Year's holiday.

New York cotton yarn dealers who recently returned from a visit to Southern mills report that spinners have made little progress in getting more help back to work. Several sellers remarked that these plants might just as well be closed for all the good they are doing in helping to ease the shortages.

Some Southern cotton yarn mills still have their outputs devoted entirely to government requirements, say buyers who have made inquiries of these plants. These spinners are obliged to shunt off "feelers," as they concentrate on the armed forces' necessities. Navy twill is said to be the current interest of several mills. Furthermore, indications are that there will be no immediate release of these establishments from Federal contracts.

Cotton yarn men report that spinners who opened up and began booking orders for the first quarter of 1946 were cleaned out quickly by buyers long starved for supplies. Most mills, dealers say, must still adhere to a rigid allocation basis in order to spread out their output.

Coarse yarn centers report that the wire trade is in the market heavily for yarns. Insulators, they add, want to be certain that they have enough supplies on hand to carry them through to the end of the quarter.

The Agriculture Department reported Dec. 8 the indicated production of cotton this year at 9,195,000 bales of 500 pounds gross weight. This estimate compares with 9,368,000 bales forecast a month previously, with 12,230,000 bales produced in 1944 and with an average production of 12,293,000 bales for the 1934-43 period.

The department reported the acreage harvested at 17,688,000 acres compared with 20,009,000 last year and with the 1934-43 average of 25,616,000. The yield of lint cotton per acre was estimated at 249.6 pounds compared with 293.5 pounds last year and with the ten-year average of 231.

KNITTING
WEAVING
YARNS

Sell Us Your Surplus Yarns

D. W. PEACH & Co.

GASTONIA, N. C.



BEST

in the Long Run

Universal Standard Ring Travelers cost you less because they give you better service. They're durable, uniform, precision made, with Bowen patented Bevel Edge to insure smooth even yarn. They reach you in perfect condition with full count assured because they come to you in sealed metal containers. Samples on request—write direct or to your nearest representative.

Send your exact requirements for samples which you can use and prove in your own mill. Write direct, or to the nearest representative.

Sealed metal containers guarantee that your U. S. Travelers will be full-count, factory-perfect.



U. S. RING TRAVELER CO.

UNIVERSAL

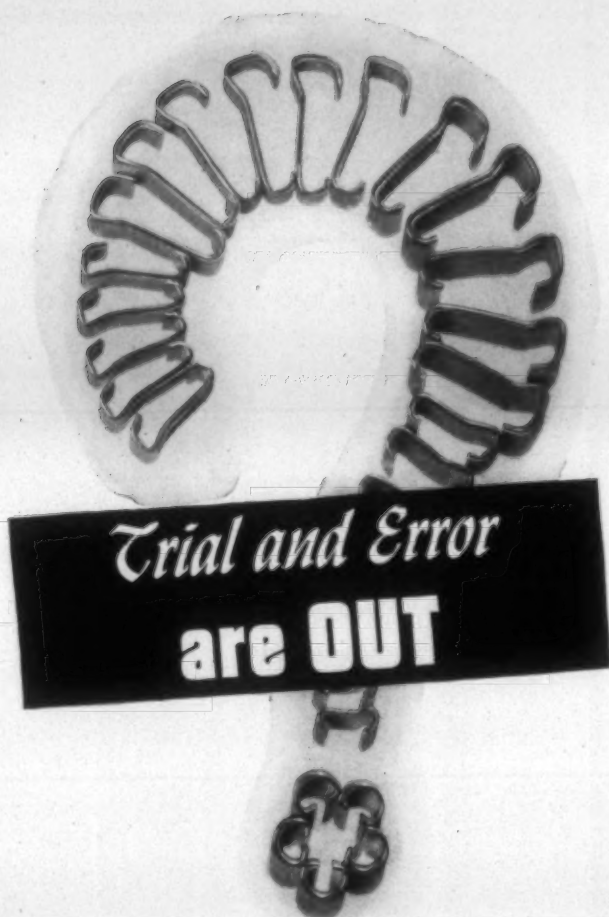


STANDARD

Providence, R. I.

Greenville, S. C.

AMOS M. BOWEN, President and Treasurer



Carter has taken the production of Travelers completely out of the rule-of-thumb stage and placed all experimentation and development, as well as production, under the strict control of our own metallurgical laboratory and experts. It is no accident that users of Carter Travelers are getting increasingly better results.

The A. B. C. Line Spinning and Twister Travelers

CARTER TRAVELER COMPANY
DIVISION OF
A. B. CARTER, INC.
GASTONIA N. C.

SALES REPRESENTATIVES

R. D. HUGHES SALES CO., 1812 S. MAIN STREET, DALLAS, TEXAS
Eastern: C. E. HERRICK, 44 FRANKLIN STREET, PROVIDENCE, R. I.
Canada: HUGH WILLIAMS & CO., 79 WELLINGTON ST., TORONTO 1
European: MELLOR, BROMLEY & CO., LTD., LEICESTER, ENGLAND
Mexico: LEO LENK, APARTADO NO. 533, MEXICO CITY, D. F.

Mechanization of Cotton Production

(Continued from Page 39) the spinning value of the fiber. With the aid of fiber and spinning test information on new progenies and strains during recent years, cotton breeders in this country have made outstanding improvements in the spinning quality of varieties recently placed into commercial production. New varieties of cotton in production this year are giving a good account for themselves in tests completed to date. Many manufacturers are taking into consideration the improved fiber properties of these cotton varieties along with grade and staple in purchasing their raw cotton, and are finding this procedure to be profitable. With information on fiber characteristics of specific varieties and growths along with grade and staple, the manufacturer can select cotton that more precisely meets his requirements. As this practice spreads, marketing methods will need to be modified to further encourage standardized production of the improved varieties. The gin is playing an important part in making these programs a success. One-variety programs, mechanical farming, and centralized ginning go hand in hand. The mechanical production of improved varieties require well-equipped gins of sufficient capacity to insure an economical service. Already these production programs are expediting the increasing tendency toward changing the ginning industry pattern to more centralized operations. Since real emphasis was first put on the need for improving the quality of American cotton about 15 years ago, many of the small-volume and obsolete gins have become dormant, the number having been reduced from almost 15,000 in 1929 to less than 10,000 in 1944.

With the trend toward larger-capacity and better equipped gins, important economies in handling cotton from the farms to the consuming centers are in sight. Economic gains are evident through the adoption of means for improving the appearance of cotton bales and providing better methods of sampling bales and protecting their contents. Gin compression, especially in the large volume, centralized gins, is mechanically and economically feasible; and affords opportunities for effecting savings in packaging and for improving bale appearance. Four of these gin standard density presses are now in operation in the field under commercial conditions. To bring about full benefits of gin compression and to provide more effective and economical means for sampling cotton at gins employing low-density presses, a mechanical sampling device for use at gins has been developed at Stoneville and subjected to field tests, and found to meet the requirements of the industry.

In conclusion, it should be emphasized that there are numerous changes in store for the cotton industry. Science is pointing the way toward more efficient production, marketing and manufacturing methods. The farsighted members of the cotton industry are eager to give new methods a trial in these operations when they are proved to be sound. The public is being effectively informed in regard to the developments that are taking place. The efforts of research workers and agricultural leaders in the South are being well co-ordinated in programs to bring about progress in the industry. It is fortunate that the producers of the delta and other areas are willing to expend their own time and money in determining the practical possibilities of equipment and practices that give promise of effecting economies in their operations, and that the ginners and handlers of cotton are giving encouragement to these efforts and attention to con-

tributions they can make toward bringing about further economies in handling cotton. It is to the interest of the cotton manufacturer to work very closely with the producer in order to obtain a product that will meet his manufacturing needs, at the lowest possible price consistent with an adequate return to producers, ginners and marketing agencies for their services.

Labor Ills Talked At A.S.M.E. Meet

The engineer's responsibility in developing a more workable set of factors in the textile labor picture was stressed by J. J. McElroy, general superintendent of Maverick Mills, East Boston, Mass., in a paper presented at the textile sessions of the 66th annual meeting of the American Society of Mechanical Engineers in New York City Nov. 29. Mr. McElroy's paper, entitled "New Factors in the Textile Engineering Field," charged mill management with being little concerned with labor's current "less-work psychology" with the result that normal tasks, existent for years, are now accomplished only with the "greatest difficulty."

C. S. Parsons of Hathaway Mfg. Co., New Bedford, Mass., delivered a paper on "Data From Activity Recording Instruments Applied to Textile Machinery." Ivan G. Easton of the General Radio Co. and Harry Searles of Van Raalte Co. presented papers on stroboscopy and Adolph Augstein of Augstein Co. discussed difficulties encountered with tricot outer garment fabrics. Victor Sepavich of Crompton & Knowles Loom Works spoke on three-dimensional stroboscopy.

At the business session, Carl D. Brown of Draper Corp. was re-elected chairman of the textile division; Arthur B. Studley of SKF Industries, vice-chairman; W. Arthur Smith of Torrington Bearing Co., secretary; George Belforti of Draper Corp., recorder.

Report Made On Textile Machinery Output

September shipments of nine textile-machinery producing plants, almost half of the 1939 industry, were down 29 per cent from the first quarter 1945 rate, according to a report issued recently by the Civilian Production Administration, the third in a series of reconversion progress reports initiated by the War Production Board and based on data received from 55 reporting industries. These nine plants anticipated a small rise in output in October, with a more rapid advance thereafter to a June, 1946, level one-fifth higher than the average monthly rate of total shipments (military and civilian products) during the first quarter of 1945.

The drop in September shipments resulted from the virtual elimination of production of military items. Shipments of the normal products of the reporting firms were 15 per cent higher than during the first quarter of this year. By June, 1946, these firms expect shipments of their normal products to be over twice the wartime rate. This will represent a doubling of the average monthly rate of output of the same plants in 1939.

Reflecting initial activity on machinery to be delivered in later months, employment in September remained at the first quarter level. The anticipated expansion of total output of these firms is expected to lift their employment in June, 1946, 25 per cent above the level in the first quarter of this year, nearly double the 1939 average.



Ahoy, There—

THESE Henley folk told me to bring to all their textile industry friends their heartiest holiday regards.

But that's not all.

I was especially charged to bring you their firm assurance that for 1946 they've set their sights to provide a bigger, better, more varied service in paper and paper specialties than at any time these past years of war limitations.

That's a Christmas present you can use throughout the year—from any and all of their four distributing divisions!

Merry Christmas and every good fortune to you.

S. Claus

Speaking for the

HENLEY PAPER CO.

(Formerly Parker Paper Co.)

Distributors & Converters

HIGH POINT, N. C.

CHARLOTTE, N. C.

GASTONIA, N. C.

Southern Paper Products Division, ASHEVILLE, N. C.

TEXTILE TUBES

*Made from Mead Chestnut Fibre to
insure extra crushing strength
and toughness*

SPIRAL WOUND CONSTRUCTION

*Providing the natural strength of Chest-
nut with its superior hardness and density*

INQUIRIES INVITED

*Samples to your specifications
on request*

THE MEAD CORPORATION
Lynchburg, Virginia

RAPIDASE

*for de-sizing cottons,
rayons and mixed goods*

Assures rapid, dependable de-sizing

**Our technical staff always
at your service.**

WALLERSTEIN COMPANY, INC.
180 MADISON AVENUE • NEW YORK

CPA Textile Provisions Are Amended

General regulatory provisions that apply to textiles and related products have been amended in order to reflect the changeover to the simplified priority rating system and eliminate those regulations that have become obsolete, the Civilian Production Administration has reported. These changes were accomplished through amendment of M-328, textile conservation order, and through the revocation of 14 directions to the order that no longer apply. The directions involved are 1, 5, 6, 7, 8, 11, 14, 16, 17, 19, 20, 22, 23 and 24.

A number of the rules in the previous edition of M-328 applied to the AA ratings, which have now been replaced by the AAA, MM and CC ratings. The general policy statement that had related to distribution by suppliers to former customers has not been included in the amended order so that more flexibility will be permitted during the changing conditions of the reconversion period. The CPA, however, pointed out that apparel manufacturers engaged in the low-cost programs have not been relieved from the "equitable distribution" revisions of the low-cost apparel order, M-328B, which remain in full effect.

Unhampered Movement of Raw Silk Sought

At the prospect of more than 140,000 bales of raw silk becoming available to the American market soon—46,000 bales at present on hand in Japan with another 60,000 bales envisioned although still in the cocoon stage, 20,000 bales in Italy and more than 20,000 bales in China—the United States Department of Commerce has strongly recommended to the Office of Price Administration that no price restrictions at all be placed on silks. A hindrance to any progressive development in the silk market in the United States, the present OPA ceiling prices on silk are far from equitable with today's market conditions, silk men have pointed out.

While the main problem overseas is the preparation of the bales for shipment to the United States, over here silk men face the problem of providing adequate transportation when the silk will soon begin to arrive at about 10,000 bales per month. Before shipments can be arranged, however, it will be necessary to evaluate the 46,000 Japanese bales immediately available.

In response to an urgent request from General MacArthur's headquarters for a silk expert, Daniel E. Douty, president of the U. S. Testing Co., has gone to Japan with the expectation of checking over the present silk stock as well as the cocoons that might be the source of 60,000 other bales and advise on their consumption and movement. Unknown factors in the raw silk deal are that the silk may be of low quality, so that American mills might not even care to process it, and the price to be paid.

A survey of the Japanese silk industry estimates the exportable raw silk production for the year ending May 31, 1946, at 105,826 bales, the equivalent of 14,106,000 pounds of raw silk fiber. No appreciable change is seen for the industry beyond a monthly production level of 8,700 bales of exportable raw silk through May 31. Silk staple fiber production in Japan, it is said, may be discontinued to increase the amount of raw silk produced for export.

Returning to silk problems at home, it was argued that relieving silks of price restrictions would tend to facilitate

domestic participation in the world market and would eventually permit the article to find its own level. OPA's Chester Bowles, it is understood, instigated the argument by outlining to all agencies interested in raw silks three alternative solutions to the pricing muddle: that a price of \$3.08 per pound in the yarn be stipulated on all raw silk; that ceilings be established which would permit a price of \$8 per pound for raw silk; and that no price curbs at all be placed on the silk.

Regarding the silk supply in Italy, reports have it that British buying activity at a high lire exchange rate has taken almost half of that stockpile, while American producers have been thwarted by the present rate of 100 lire to the dollar. It has been expressed in some government circles that a suggested change from the present rate to 200 lire per dollar would greatly aid in activating buying of Italian silk.

Contact Gear Invented for Frame

A patent on a new contact gear for roving frames in card rooms of textile mills has been applied for by C. L. Moore and William F. Lee of Spartanburg, S. C. Mr. Moore is connected with the Southern Railway and Mr. Lee is a textile plant mechanic. According to the inventors, the new gear will require less time for removing and will require no lost motion in operation. In their own words, "The rubber cushion to protect the tooth heads when it comes in contact with the bevel gear, saves wear and tear on the bevel and contact gears. This new gear can be changed in five minutes, representing a big saving in time and labor. The primary object of the invention is to provide a contact or gap gear, having removable tooth sections whereby replacement of the gear is unnecessary, thus saving not only cost but the gear as well."

South and Southwest Back Cotton Fund

The signing of agreements covering 67.5 per cent of all cotton spindles in the South and Southwest has assured textile mill participation in the cotton industry's \$2,000,000 post-war fighting fund to retain and expand its markets, William P. Jacobs, president of the American Cotton Manufacturers Association, has announced. Textile mills had agreed to contribute to the fund which supports the National Cotton Council program, if contracts were signed for two-thirds of the cotton belt's 17,271,672 active spindles. Mills with contracts will support the industry's united program with contributions of five cents on each bale of cotton they consume. North Carolina leads the mills in number of spindles signed, with 4,047,933 under contract. South Carolina has 3,261,055 signed and Georgia 2,162,798.

Cotton Thread Price Controls Suspended

Price control over cotton threads were suspended Dec. 4 by the Office of Price Administration. The suspension covers domestic cotton threads for sewing, crocheting, darning, knitting and embroidery, cotton industrial stitching thread and cotton thread-weight goods. OPA pointed out that sellers of cotton industrial stitching thread may not charge more than the June 1, 1945, ceiling price plus the permissible "adjustable pricing" percentage for goods delivered on an adjustable pricing basis between Aug. 7 and Dec. 4, 1945.

John P. Maguire & Company

INCORPORATED

Factors

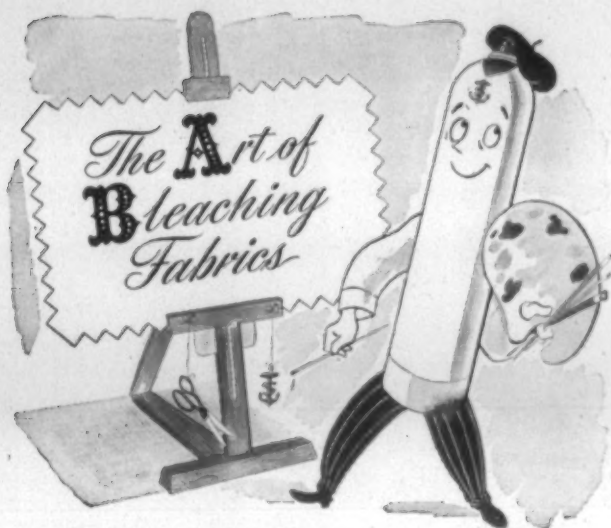
370 FOURTH AVENUE
NEW YORK, 10,
N. Y.

Check Credits

Cash Sales

Absorb Credit Losses

CORRESPONDENCE INVITED



.. OR HOW SOLVAY Liquid Chlorine serves as No. 1 trouble-shooter

Over and over, textile mills throughout the industry commission SOLVAY Liquid Chlorine as their No. 1 trouble-shooter for bleaching operations.

That's because . . . as a bleaching agent it helps safeguard against spotty bleaching and uneven colors . . . and as a water conditioner it controls the quality of the water.

SOLVAY Liquid Chlorine is *both* versatile and economical. Its controlled quality, highest standard of purity, and dependable uniformity are your assurance of *best* performance.



SOLVAY SALES CORPORATION

Alkalies and Chemical Products Manufactured by
The Solvay Process Company
40 Rector Street New York 6, N. Y.

PERFORMANCE IS PROOF



VOGEL FROST-PROOF HYDRANT

For farms, dairies and all outside installations. Running water every day of the year. Will never freeze when properly installed. Nearly 100,000 in use.

... and the proof of Vogel performance is daily being recorded on farms and in war industries throughout the nation. There, where endurance is gauged by capacity to serve under the most trying conditions, you will find Vogel Closets and Frost-Proof Hydrants demonstrating again and again the built-in satisfaction that is the cornerstone of the Vogel tradition. Good judgment dictates that, for your next job, you Specify Vogel.

Joseph A. Vogel Co.
Wilmington 99, Delaware

Southern Textile Association Holds Convention

(Continued from Page 26) will be qualified to assume positions of responsibility in the industry. With this backing, it is up to the textile schools to deliver.

I believe all of us will agree that it is impossible for any school to train and graduate an *experienced* textile man. I also have heard criticisms from time to time that the average textile-trained man is too "one-sided" in his education. While the graduates usually are well trained in textiles, they are not well rounded and frequently find it difficult to adapt themselves to certain types of work.

It is my firm belief that the ideal textile man should be well-rounded in his education. He should be well trained not only in textiles but also in the related subjects of mathematics, engineering, chemistry, etc.

The mills of Georgia have indicated to me that they want to obtain high-caliber men to be trained for the textile industry. Frequently the average boy graduating from high school has little idea of what he wants to study. Quite often he decides to specialize in a certain field because of the "glamour" and "hurrah" given a particular field through advertising and popular acclaim. He seldom studies the industry and calculates what the "long-pull" possibilities will be.

This leads up to one point. In order to attract a greater number of good prospects to the textile industry, that industry must be willing to put forth some effort to get these men. There must be not only close co-operation between the textile mills and the textile schools, but the textile industry must be willing to offer *sufficient incentive* to attract these men. The incentive must be in the form of a livable wage to start with, practical training to round out the training received in school, and an opportunity to advance when he has demonstrated that he is capable of accepting greater responsibility.

In the past the incentive picture has not looked very bright for the average new textile graduate. There have been times in the past when the new graduate was put into the mill, given a broom, and told to sink or swim. The idea, of course, was to take some of the starch out of the new man and if he made the grade he would probably turn into a good textile man. Fortunately, this point of view is rapidly changing. I quite agree that a number of new men frequently need the "rough edges" knocked off; but by the old process good men, who would have made the grade with a little encouragement, were lost to the industry. I am quite sure the same result can be obtained by careful planning on the part of the mill management, and some mills are now doing an excellent job.

Other engineering industries recognized the weakness of the old system long ago. Their present methods of selection and encouragement of new men through practical training, etc., has paid dividends. Textile mills must meet this type of competition in the future in order to attract the type of men they want for the textile industry. The keen competition all of us expect in the future is in itself a sufficient motive to justify the "enticing," if you please, of keen, well-trained young men into the textile industry.

We are now working with the mills on the details of an apprenticeship plan with a guaranteed salary, etc. To meet our part of the challenge we are planning new facilities for teaching, redesigning our courses in an effort to meet current demands. We expect to "bear down" on the teaching

of the fundamentals of textiles and related subjects in order to get across the "why" as well as the "how" of the work.

Our mill is our laboratory. We want to get across to the student the *fundamentals* connected with the operation of the machines. While he will have a good knowledge of *how* to operate them, we do not propose to spend all of our time trying to turn out operators who can come into your mill and make top wages immediately as spinners, weavers, or what have you, on an efficiency basis. We do not believe that is what you want. I am sure your mill can produce a much more efficient machine operator in three months than a school can produce in three years. Not only that, but the details of operation probably will be somewhat different in each mill, and you would have to lose time undoing what we tried to do. You probably run into enough of that as it is now!

As schools and textile manufacturers, all of us are interested in turning out men who are able to handle both synthetic and natural fibers efficiently to the best advantage, whether this be separately or in blends. From the standpoint of the textile schools, it is our duty to carry on research on our cotton fibers, as well as other fibers, in conjunction with the mills. In order to do this to the best advantage, the schools and the mills must co-operate in every way possible. The textile schools must be kept abreast of the problems in the mills.

If we are not willing to do an intensive job of research to determine how far we can go, then it seems entirely possible that the time will come when we may have to decide whether the South is going to have to grow cotton for the fiber and seed by-products or grow cotton simply as a source of cellulose.

Tubize and Celanese Propose Merger

A merger of Tubize Rayon Corp. into the Celanese Corp. of America has been provided for in an agreement signed by both corporations. The merger proposes that each outstanding share of 4 3/4 per cent preferred stock of Tubize Rayon Corp. shall be converted into one share of first preferred stock, \$4.75 series, of Celanese Corp. and each outstanding share of common stock of Tubize be converted into two-thirds of a share of common stock of Celanese Corp. Meetings of shareholders to take action on the proposed merger are expected to be held in January. Celanese Corp. operates yarn and plastic plants at Cumberland, Md., Narrows, Va., Newark, N. J., and weaving plants at Williamsport, Pa., Staunton, Va., and Burlington, N. C. The company is building a plant at Bishop, Texas, to make chemicals from natural gas. Tubize, also a producer of rayon yarns, has plants at Rome, Ga., and Hopewell, Va.

New Ribbons and Fabrics Company Formed


United Merchants and Manufacturers, Inc., and Freyberg Bros.-Strauss, Inc., have formed a new company for the manufacture and sale of ribbons and narrow fabrics. The new firm will take over the name, plants and the entire ribbon and narrow fabric business of Freyberg Bros.-Strauss, Inc., and will augment their present line with various textile specialties. Operations of the new company will begin early in January under the management of the current personnel of Freyberg Bros.-Strauss, Inc.



Stapling counter cards . . . tacking cloth to wood . . . stitching seams of leather gloves . . . these are only a few of many Acme Silverstitcher jobs which are done as easily, economically and speedily as stitching all types of boxboard containers.

Silverstitching is "stitching with steel". . . automatic forming and driving of steel stitches from continuous-length coils of Acme Silverstitch stapling wire . . . combining positive fastening with attractive appearance.

For facts on the economies which Silverstitching can bring to your specific closure, tacking and fastening operations, write us. ACME STEEL COMPANY, 2838 ARCHER AVENUE, CHICAGO 8, ILLINOIS.

Silverstitch  *Silverstitchers*

ALSO MANUFACTURERS OF ACME STEELSTRAP AND STRAP APPLYING EQUIPMENT

Our SERVICE Backed by Years of Experience
—enables us to give you the **BEST** in the

MANUFACTURE OF

Steel Rolls
Flyer Pressers
Card Room Spindles
Lifting Rods

REPAIR OF

Steel Rolls
Roving Spindles
Spinning Spindles
Flyers

OVERHAULING OF

Fly Frames
Spinning Frames
Twisters
Spoolers

MOVING OF

All Kinds of Textile Machinery

Southern

SPINDLE & FLYER CO., Inc.

WE MANUFACTURE, OVERHAUL AND REPAIR COTTON MILL MACHINERY

CHARLOTTE, N. C.

W. H. Monty, Pres. and Treas.

**MITCHELL'S
REPRESSED OIL**

A saponified oil used in the
woolen trade for over a
century.

Available today in the same
high standard of quality



CENTURY STEARIC ACID CANDLE WORKS, INC.

41 EAST 42nd STREET • NEW YORK 17, N.Y.

Application of Two Resins Described

The textile resin department of American Cyanamid Co. announces the availability of Textile Finishing Bulletins No. 108 and No. 109 entitled, respectively, "Aerotex Resin 7513" and "Aerotex Resin M-3."

Aerotex Resin 7513 is an emulsion blend of synthetic resins and was used widely during the war in combination with Aerotex Resin M-3 for the processing of Army nettings which were used as protection against insects. Aerotex Resin 7513 is described as economical to use in volume finishing where cost is an important factor. Besides adding weight to a fabric, it is said to be an excellent carrier for pigments when used directly in the resin finishing operation.

The second bulletin describes the properties and uses of Aerotex Resin M-3, a melamine derivative applied to cottons and rayons to give crease resistance and maintain shrinkage control. According to the manufacturer it can be used with various other Aerotex resins to give a number of unique finishing results, such as: a permanent glazed chintz effect on cotton that will withstand washing; for binding pigments, fire retardants of flock, when used in conjunction with Aerotex Resin 7513; resistance to gas fading of acetate dyes; to give anti-crease and permanent water repellency when used in conjunction with Permel Resin No. 100; to give unusual results in crease-proofing and control of shrinkage with rayons and mixtures of synthetics.

Copies of the two bulletins may be secured from the company's headquarters at Bound Brook, N. J.

Southeastern A. A. T. C. C. Re-elects Officers

A. Kempton Haynes of Atlanta, Ga., who is a representative for Rohm & Haas Co., was re-elected chairman of the Southeastern Section of the American Association of Textile Chemists and Colorists at a meeting of the section in Atlanta Dec. 15. Other officers, also re-elected, are: M. T. Barnhill of Avondale Mills at Sylacauga, Ala., vice-chairman; D. M. Waddle of West Point (Ga.) Mfg. Co., secretary; A. J. Morse of North Georgia Processing Co., Toccoa, treasurer; and W. B. Griffin of Kali Mfg. Co., Atlanta, councilor.

Speakers at the meeting were Graeme Whytlaw of American Viscose Corp., Marcus Hook, Pa., J. R. Chapman of the Girdler Corp., Louisville, Ky., and Dean Herman A. Dickert of the A. French Textile School, Georgia School of Technology. Mr. Whytlaw discussed "New Fibers" and Mr. Chapman spoke on "Electronics in Textile Mills." Dean Dickert described his school's plans for physical expansion, extended curricula and new training programs for both students and faculty.

Book Presents Science of Process Control

The development and emergence of automatic processing control in its present status as an exact science is explained simply and instructively in a new book, *The Principles of Industrial Process Control*. Written by Donald P. Eckman, engineer of Brown Instrument Co., industrial division of Minneapolis-Honeywell Regulator Co., the book treats of the overall basic fundamentals of the science of automatic industrial control. The book, published by John Wiley & Sons, Inc., New York, explains automatic control, measurement and process in a

language that is understandable to the student and valuable as a guide and reference for the processor and his technician. Subjects covered include measuring means of industrial controllers, characteristics of measuring means, modes of automatic control, final control elements, process characteristics theory of automatic control, quality of automatic control, application of control engineering, automatic control systems, maintenance of exact control. The volume ends with a glossary of 126 terms and definitions. It also provides 119 references.

Industry Has Niche for Disabled Veterans

Disabled war veterans who seek opportunities for gainful peacetime employment will be heartened by information released as the result of a survey recently completed among its industrial policyholders by the American Mutual Liability Insurance Co. of Boston. The survey was made in connection with a five-point plan developed by the American Mutual in collaboration with other insurance companies to assist industries in hiring disabled workers safely and productively. It was found that most manufacturers are aware that they may receive employment applications from considerable numbers of handicapped persons, and are laying their plans accordingly. Some concerns already have special departments set up to give returning servicemen specialized training before placing them in jobs suited to their physical and medical limitations. Other plants are studying their possible future openings to determine which jobs can be set aside for the physically handicapped.

Shenandoah Textile Executives Hear Larrick

The importance of research and fabric engineering in the future of the textile industry was emphasized by Dr. Lewis Larrick of the Institute of Textile Technology, Charlottesville, Va., when he addressed the quarterly meeting of the Shenandoah Valley Textile Executives Association Nov. 13 at Winchester, Va. The association includes executives of the following mills: Virginia Woolen, Clearbrook Woolen, and Winchester Woolen Companies, Winchester; Charlottesville Woolen Mill and Dunn Woolen Co. and Berkeley Woolen Mills, Martinsburg, W. Va., and W. J. Dickey & Sons, Oella, Md.

Hercules Offers Poster On Timely Theme

"The Spirit of '46," Hercules Powder Co.'s 1946 calendar painting which conveys the spirit of peace, demobilization and reconversion, is being offered to industry in large poster-size copies. The painting depicts three returned veterans leaving work after their first day on the job. Hercules is offering the poster in quantities, lithographed in eight colors, 27½ inches by 44 inches. Painted by the late N. C. Wyeth, the work recalls the famous Revolutionary War painting, "The Spirit of '76." Posters may be obtained by writing Hercules Powder Co. at Wilmington 99, Del.

A new industrial engineering firm, Watson and Hart, has been formed at Greensboro, N. C., by John D. Watson and James E. Hart. The partners, who assisted in supervision of construction at the Oak Ridge, Tenn., atomic bomb plant, will specialize in the design of industrial buildings. Their offices are located at 216 West Market Street in Greensboro.



A CARD WITHOUT CLOTHING IS LIKE A HAIRBRUSH WITHOUT BRISTLES!



We make this obvious statement to emphasize that the clothing is the working tool, while the card is only the holder; and that your card's efficiency is in **DIRECT PROPORTION** to the condition of its clothing.

To **KEEP** your clothing efficient, have it inspected regularly. Use Ashworth Card Surveys made by practical card men; they're free. Ask us for details.

ASHWORTH BROS., INC.

AMERICAN CARD CLOTHING CO. (Woolen Div.)

FALL RIVER*†‡ WORCESTER*† PHILADELPHIA*†‡ ATLANTA*†‡
GREENVILLE†‡ CHARLOTTE†‡ DALLAS†‡ (Textile Supply Co.)

*Factory †Repair Shop ‡Distributing Point

PRODUCTS AND SERVICES: Card Clothing for Cotton, Wool, Worsted, Silk Rayon and Asbestos Cards and for all types of Napping Machinery. Brusher Clothing and Card Clothing for Special Purposes. Lickerin Wire and Garnet Wire. Sole Distributors for Platt's Metallic Wire. Lickerins and Top Flats Reclothed.



3 FACTORIES ... 6 REPAIR SHOPS ... 7 DISTRIBUTING POINTS

WITH **FLEXLASTIC*** COVERING **CONDOR RUBBER COVERED ROLLS**

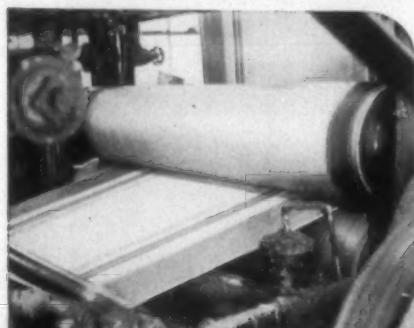
do not oxidize, surface harden, crack or change density

and your textile finishing continues uninterrupted because of the uniform texture, accurate finish, and long wearing qualities of Condor Rolls.

Each Condor Roll is designed for your specific job. Each is suited to your particular operating conditions and gives you maximum service and efficiency.

Factories: North Charleston, S. C., Passaic, N. J. and Neenah, Wis.

*The term FLEXLASTICS is an exclusive MANHATTAN trade mark. Only MANHATTAN can make FLEXLASTICS.



This machine has been exclusively MANHATTAN equipped in its 12 years of operation. The original belt, also MANHATTAN, is still in service.

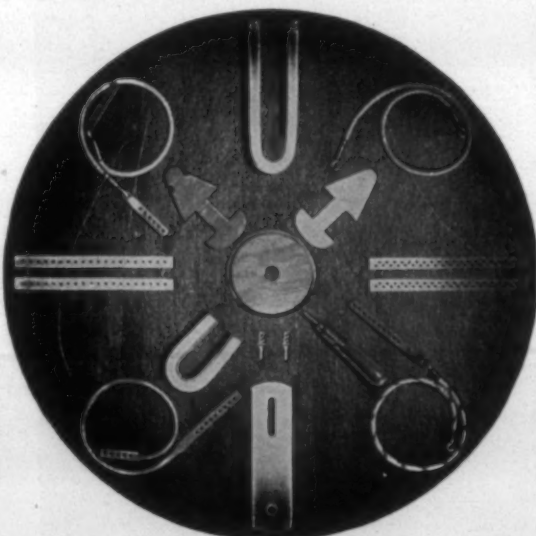


KEEP AHEAD
WITH
MANHATTAN

THE MANHATTAN RUBBER MFG. DIVISION
OF RAYBESTOS-MANHATTAN, INC.
Executive Offices Passaic, New Jersey

RICE DOBBY CHAIN CO.

MILLBURY, MASS., U. S. A.



Southern Representatives

John P. Batson, P. O. Box 1055, Greenville, S. C.
R. E. L. Holt, Jr., P. O. Box 1474, Greensboro, N. C.

(Ready to Serve You)

Abaca Cultivation Thrives in Central America

Abaca, from which Manila rope is made, is now being produced in quantity on five plantations of 27,500 acres in four Central American republics—the first time abaca has been grown in the Western Hemisphere except experimentally. Heretofore abaca was obtained largely from the Philippines. Its western cultivation may aggregate 25,000,000 pounds this year, it is estimated, and from 45,000,000 to 50,000,000 pounds in 1946. As a result of intensified cultivation, exports of abaca from Panama are expected to be about 14,000,000 pounds this year compared with about 6,000,000 pounds in 1944.

United States Government agencies have aided the establishment of an abaca industry in the Western Hemisphere, the first planting of Philippine abaca having been made at a plant quarantine station on Columbus Island, off the eastern Panama coast, under the supervision of the U. S. Department of Agriculture. United States Government procurement agencies during the war contracted for the entire crop of the fiber.

Price Increases for Coated Fabrics

Reconversion provisions already in effect allowing industry-wide ceiling price increases for specified consumer durable goods have been extended to cover a limited number of coated fabrics, the Office of Price Administration has announced.

The extension, effective Nov. 10, applies to coated fabrics whose 1944 production was one-half or less of their last representative period of peacetime production. The reduced production must have resulted from government restrictions or from use of the manufacturing facilities for other war goods. The third condition is that, because of a change in government restrictions or in the needs of the war program, manufacturers generally are able to begin production again or to increase substantially the present production.

Los Angeles Plans Fabrics Exposition

The Textile Association of Los Angeles, Cal., will sponsor a fabrics exposition, to be called "Fabrics of the Future", in Los Angeles in the fall of 1946. The program is timed to permit the fabric, yarn, and finishing producers of the country an opportunity of presenting those products which have been withheld from the public, due to war conditions. The educational value of such displays will be stressed, as well as the commercial and consumer qualifications. Textile displays will embrace all fields of apparel, household, and decorative fabrics. Fabric end-use will be exploited in a romantic and colorful California manner. The exposition will be staged in the largest available quarters and will be of a ten-day or two-week duration and will be made of national scope.

Hercules Plans New Plastics Laboratory

Plans for a new plastics laboratory at its Parlin, N. J., plant have been announced by Hercules Powder Co. The laboratory will serve as headquarters for the company's development and research work on plastics, and tests will be conducted there on the three plastics materials—ethyl cellulose, cellulose acetate, and nitrocellulose—produced at Par-

lin and at other plants. Chemists at the laboratory will work with the company's technical service men in developing new product applications, and in helping to find answers to the production problems of customers. Construction probably will begin early in 1946.

The laboratory, with facilities for compounding finished plastics for testing, will be set up in such a way that customers who buy basic materials from Hercules can see new techniques applicable to their work demonstrated, and can work with the laboratory chemists on their processing problems.

The building will centralize in one laboratory the chemical and mechanical development work being done at Parlin on plastics. R. L. Stern, chemical superintendent, will be in charge, with Walter Gloor as plastics supervisor. Plans include several constant-temperature rooms in which plastics qualities such as flexibility, hardness and tensile strength, can be tested under conditions specified by customers.

Sherdye Pigment-Resins Are Introduced

A new line of "oil-in-water" pigment resin finishes for use in the operation of pad-dyeing fabrics has been announced by Sherwin-Williams Co. as a product of its pigment, color and chemical division. This water-thinned emulsion, according to its manufacturer, requires no expensive and inflammable solvent thinners, nor extenders and high speed mixers. The new "Sherdye Water-Thinned Pigment-Resin" colors, it is predicted, will cut costs for both small and large-scale runs of pad-dyed fabrics, with less time lost in preparing a run or in changing colors between runs. Other claims made in behalf of the new pigment resin finishes are that, in using them, equipment is simply washed down with water between operations to clean-up and that, unlike present pad-dyeing operations, the Sherdye Pigment-Resins require no equipment tie-up for matching colors.

Wabash Appliance Becomes Sylvania Subsidiary

Wabash Appliance Corp. of Brooklyn, N. Y., manufacturer of photoflash and incandescent lamps, will merge with Wabash Photolamp Corp. and Birdseye Electric Corp. Jan. 1, to become a wholly-owned but independently operated subsidiary of Sylvania Electric Products, Inc. A. M. Parker will remain president and general manager of Wabash, with headquarters at the Brooklyn plant. Sales staffs, sales policies, product brands and distribution outlets will remain unchanged. The Brooklyn plant will continue to manufacture photolamps, incandescent lamps, reflector lamps and infra-red heat lamps, with augmented production of light conditioning and other standard light bulbs. Additional factory units planned for installation at the Brooklyn plant are expected to increase photoflash production to more than double that of the highest pre-war year.

Sun Chemical Corp., formerly General Printing Ink Corp., has acquired all the properties and assets of Warwick Chemical Co., it has been disclosed in an application to list 83,000 additional shares of Sun Chemical \$1 par value common stock on the New York Stock Exchange. The application further disclosed that this number of shares was the consideration involved in the transfer of Warwick properties and assets.



Rings wavy?
Replace with
DIAMOND

FINISH

Replace with DIAMOND FINISH for 3 reasons: 1. Our 73 years experience is "performance-insurance" of the finest sort. 2. Our COMPLETE line of over 1,000 styles and sizes includes exclusive speed designs of great production possibilities. 3. Our high polish DIAMOND FINISH permits maximum speeds, maximum production.

WHITINSVILLE (MASS.)

SPINNING RING CO.
Makers of Spinning and Twister Rings since 1873

Developed to meet military needs—
Now available to the Textile Industry

Super-Chrome Plating

AN EXTRA HARD CHROMIUM PLATING

FOR FLYERS, TWISTER ROLLERS
SPINNING and TWISTER RINGS, Etc.

Prevents rust and corrosion;
reduces friction and thus
insures much longer wear

Also Cadmium and Zinc Plating

Full Details on Request Without Any Obligation. Write Today

SIMMONS PLATING WORKS

219 Prior St., S. W.

Atlanta 3, Ga.



KNOXALL

ROLLER, SLASHER AND CLEARER CLOTH
SANFORIZING BLANKETS
SLASHER JACKETS
ENDLESS REVOLVING CLEARERS

EDWARD H. BEST & CO.

EST. 1888 BOSTON, MASS. INC. 1901
ATLANTA, GA. NEW YORK

W. C. HAMES H. W. CURTIS
185 Pinecrest Ave., Decatur, Ga. 735 W. Crescent Ave., Allendale, N. J.
Dearborn 5974 Allendale 3521

GREENVILLE, S. C.
RALPH GOSSETT—WILLIAM J. MOORE
15 Augusta Street, Telephone 150

PENICK & FORD, LTD.
INCORPORATED

CORN STARCHES, DEXTRINES, GUMS, CORN SUGARS & SYRUPS
NEW YORK, N. Y. - - - CEDAR RAPIDS, IOWA
SOUTHERN OFFICES: ATLANTA, GA. - - - SPARTANBURG, S. C.

*John: Why not let
the Penick & Ford
Textile Laboratory
in Atlanta check
specifications on
that cloth?
Jim*

OBITUARY

R. T. Persons, 74, president of Forsyth Cotton Mills, died Nov. 23 at Forsyth, Ga., following a heart attack. He is survived by his son, R. O. Persons, who is secretary and treasurer of the firm, two daughters and a brother.

Maj. Nicholas D. Carpenter, formerly a chemist for Union Bleachery at Greenville, S. C., and missing in action since Aug. 14, 1944, has been declared dead by the War Department. He is survived by his wife, two daughters and two sisters.

Robert Lane Cumnock, 90, president of the former Alta Vista Cotton Mills, died Nov. 24 at Alta Vista, Va. He is survived by a daughter and several grandchildren.

Frank Goldberg, 66, president of Algodon Mfg. Co., died Nov. 20 at his home in Bessemer City, N. C., following a heart attack. He is survived by his wife, three sons, two daughters and three brothers.

Richard Hutchinson, 75, former vice-president and assistant treasurer of Dunson Mills, died Dec. 5 at his home in LaGrange, Ga. Survivors include his wife, two sons and one brother.

Claude Raymond Dellinger, 55, machine shop foreman for Plant No. 4 of Cannon Mills Co., died Dec. 13 of a heart attack at his home in Kannapolis, N. C. He is survived by his wife, two sons, two daughters, two brothers and a sister.

Raymond Glover Slaton, 58, assistant treasurer of Brighton Mills, Inc., Shannon, Ga., died recently at his home in Rome, Ga., as the result of a heart attack. He has been affiliated with Brighton Mills since its formation in 1925. Survivors include his wife, a son and two sisters.

Arthur C. Jones, 70, president of Ruby Cotton Mills, Inc., died Nov. 17 of a heart attack at his home in Gastonia, N. C. He is survived by his wife, two daughters and two sons.

Norman W. Gayle, brother of Walter W. Gayle, Southern agent for Saco-Lowell Shops at Charlotte, died recently at his home in Montgomery, Ala., as the result of a heart attack. He is survived by his wife, a son and daughter, two brothers and two sisters.

Fritz Stemple, 56, manager of the colored goods department of Neuss-Hesslein & Co., New York City, died last month. He is survived by his wife, a son and two daughters.

Morrell H. Hayman, 57, branch manager for Stein, Hall & Co., Inc., at St. Louis, Mo., for the past 17 years, died Nov. 29 after an illness of three months. He is survived by his wife and one son.

John H. Horsley, 67, retired West Point Mfg. purchasing agent, died Dec. 5 at West Point, Ga. He had been associated with the company 47 years prior to his retirement last June 30. Survivors include his wife and five sisters.

Story of Anderson, Clayton Is Presented

The story of Anderson, Clayton & Co., founded and built to dominance in the field of cotton merchandising by Will Clayton of Texas, now assistant secretary of state, is graphically told in two installments which have appeared in the November and December *Fortune*. Entitled "Will Clayton's Cotton," the two-part article traces the origin, growth and prosperity of the Houston, Tex., firm until the present time when "it is ready to supply cotton to all comers, from the governments of England, Russia, and France to the smallest private textile mill."

Today, Anderson, Clayton & Co. is awaiting the re-establishment of international credit to unloose its vast cotton warehouse supplies in Houston to merchants, cotton mills and a "ragged world." Its activities are divided into four separate but integrated areas: cotton merchandising, warehousing, and compressing, oil-milling, ginning and a "miscellaneous" division that serves the three others.

Although none of the original founders of the company are active in the business today, Will Clayton, while out of the management, remains the principal stockholder. Monroe D. Anderson and Frank E. Anderson, whose name the firm still bears, are dead. Ben Clayton, another founder, is retired. Will Clayton's beginning in the business, his theories and administration, are treated of in the article. Also, the associates of Clayton, whether partners or staff members, come in for their individual write-ups.

Philadelphia Institute Fund Totals \$516,901

The Philadelphia Textile Institute Foundation \$2,000,000 building fund has passed its first half-million mark, it was announced Nov. 29 by Alban Eavenson, national campaign chairman. Subscriptions to the fund now total \$516,901, represented by nearly 500 corporate and individual contributions.

"The textile industry's response to our appeal," said Mr. Eavenson, "has been most gratifying. Contributions have been received from all the various branches of the industry in all sections of the United States. The fund is necessary for the Philadelphia Textile Institute to produce a greater number of young men and women possessing a well-rounded textile college education and equipped to take their places in meeting the tremendous

J. E. SIRRINE & CO.
GREENVILLE • SOUTH CAROLINA

Engineers
ESTABLISHED 1902

TEXTILE MILLS • RAYON PLANTS • KNITTING MILLS • DYE HOUSES
BLEACHERIES • STEAM UTILIZATION • STEAM POWER PLANTS
WATER • WASTE DISPOSAL • APPRAISALS • PLANS • REPORTS

5 WAYS TO SPEED YOUR NYLON HOSIERY PROCESSING

Maintain smooth production flow — Improve hosiery quality

- LAUREL Coning Oil #443 for better conditioning
- LAUREL Nynit C for better knitting
- LAUREL Supergel for cleaner hosiery
- LAUREZOL #6 for level shades
- LAUREL Peramel for fine appearance, lasting finish

These 5 LAUREL NYLON Hosiery Processing Agents will enable you to speed up adequate stocks for your share of the tremendous demand for Nylon hosiery.

LAUREL NYLON Hosiery Processing Agents give you a hard-to-beat combination: 1. an excellent conditioner, makes for better knitting; 2. an effective lubricator, prevents sticking in pre-boarding operation; 3. a thorough scour, leaves hosiery clean, ready for dyebath; 4. an active dispersing agent, has greater penetration, produces level shades; 5. a lasting finish, adds to the beauty and appeal of your hosiery.

Tested and used pre-war by well-known mills and dye-houses, LAUREL NYLON Hosiery Processing Agents will give you a head start. Phone, wire or write today for trial order and directions for use.

• SOAPS • OILS • FINISHES •
LAUREL SOAP MANUFACTURING CO., Inc.
Wm. H. Bertolet's Sons • Established 1909
WAREHOUSES—PATERSON, N. J. • CHATTANOOGA, TENN. • CHARLOTTE, N. C.
OFFICES—2607 East Tioga Street, Philadelphia 34, Pa.

TANKS

For over 80 years the Southern textile industry has looked to Cole for design, fabrication and erection of elevated tanks for sprinkler and general service.

Based on long experience with textile requirements, Cole elevated tanks are correct in design. Their simplicity contributes to their low cost of maintenance.

Our experienced engineering department is at your service to assist in solving your problems. Write for our general catalog—"Tank Talk."

R.D. COLE MFG. CO. ESTABLISHED 1854
Newnan Ga.

TANKS TOWERS CYLINDERS VESSELS

DARY RING TRAVELERS

Mean New Dollars For Old!

Dary Ring Travelers assure a spinning and twisting economy that puts money in your pocket and spinning and twisting results that make new customers and satisfy old.

Try Dary Ring Travelers now!



THE DARY RING TRAVELER COMPANY

TAUNTON, MASSACHUSETTS

JOHN E. HUMPHRIES, BOX 843, GREENVILLE, S. C.

JOHN H. O'NEILL, BOX 720, ATLANTA, GA.

H. REID LOCKMAN, BOX 515, SPARTANBURG, S. C.



Leather Belting

all types

CHECK (domestic) STRAPS

Goodrich Mechanical Rubber Goods

KEYSTONE BELTING COMPANY

213 NORTH THIRD STREET, PHILADELPHIA, PENNSYLVANIA

Southern Representative

T. J. DIGBY, JR. • BOX 244 • PHONE 159-W • GREER, S. C.

MCLEANER

TEXTILE MILL SCRUBBING POWDER



Abrasive and Soluble Cleansers
Floor Squeegees and Rakes
Replacement Rubbers
Hand and Machine Scrub Brushes

Immediate Shipments

The DENISON MANUFACTURING CO.
ASHEVILLE-NORTH-CAROLINA

Johnson Chemical Company



CHARLOTTE, N. C.

DDT

Licensed manufacturers and suppliers of 5% DDT
in industrial quantities. Immediate shipment.

MANUFACTURING CHEMISTS

TELEPHONE 6450

P. O. BOX 1418

reconversion problem and other problems which now confront the textile industry. A new building for the institute, new machinery and equipment, student dormitory facilities, and a ten-year maintenance fund are among the improvements to be established by the fund. The results of this campaign, over the years, will be incalculable in their benefit to the textile industry—far more than the \$2,000,000 the industry will contribute now."

Research Shows Versatility of 'Ceglin' Ethers

Results of research by Sylvania Industrial Corp. in developing its "Ceglin" brand of alkali soluble cellulose ethers have proven these ethers to be versatile finishing agents and have revealed new facts about their application procedures on various kinds of textiles. Widely used during the war on olive drab insect cloth, head nets, camouflage cloth, they are now principally used as finishes for men's shirts, bed sheetings, table damasks, pillow cases, work clothes and dress fabrics of cotton, rayon and spun rayon.

Ceglin finishes also are said to make an excellent binder for pigment colors and enable the manufacturer to carry on finishing and coloring operations simultaneously. Best results, however, require a proper selection of pigments for type and grinding so that ease of penetration, uniformity and increased depth of shade at best money value may be obtained. Experience has shown that it is imperative that cloth intended for pigment-dyeing with Ceglin be uniformly absorbent and that in padding no increase or wrinkles pass through the nip. It is also pointed out that when the warp is sized with Ceglin, the material does not need to be de-sized.

The low viscosity types of Ceglin—Medium and Soft D—have been developed for filament and spun rayon and applied in a patented process. It is said that low percentages of them have remarkable bulking effects. Ceglin of Viscosity 2 is claimed to produce a crisp finish for slacks and other fabrics. As with cottons, both acid and the semi-drying method may be used for coagulation, the latter producing a crisp effect and acid a soft finish.

Highly Concentrated Oxidant Is Developed

Commercial production of hydrogen peroxide, 90 per cent (plus) by weight, by Buffalo (N. Y.) Electro-Chemical Co., Inc., has taken it out of the classification of a laboratory curiosity, after research has shown that concentrated hydrogen peroxide of really high purity is a stable material that may be handled without hazard. Heretofore, the only disclosure of concentrated hydrogen peroxide production has been in connection with the importance of this material to the German military machine, demonstrated during the last year of the war by the launching of the Nazi V-weapons. Data published by the industrial intelligence staff of Chemical Warfare Service show that the Germans had achieved large scale production of hydrogen peroxide, 80-85 per cent by weight, after several years of intensive development.

Without knowledge of the German development and after short but intensive research, Buffalo Electro-Chemical Co., Inc., produced, in late 1944, a highly concentrated hydrogen peroxide. Application of modern chemical

engineering principles and manufacturing skill has led to the economical production of a product with the requisite degree of purity. The possible commercial applications of this material are innumerable. Hydrogen peroxide, always considered an ideal oxidant, mainly because it leaves no residue, promises to be of great utility in fundamental chemical reactions. Not only is the concentrated hydrogen peroxide applicable to many new reactions because of the comparative freedom from water, but many known oxidation reactions take place faster and more completely with this product.

Tubize Announces New Filament Rayon Yarn

A new, tough viscose filament rayon yarn of medium high strength and said to possess excellent dyeing qualities has been announced by officials of Tubize Rayon Corp. The first use of the new yarn will be in the manufacture of linings for men's clothing. Hathaway Mills and the laboratory plant of Tubize are now in semi-commercial operation in making the new yarn. Dykeman, Loeb & Co. of Philadelphia will convert the yarn. Commercial deliveries will not be made in the near future. Tests reportedly indicate that the yarn has high efficiency in warping and has a fine degree of evenness, depth and bloom.

Eastman Establishes New York Sales Offices

Tennessee Eastman Corp. of Kingsport, Tenn., producer of cellulose plastics and acetate rayon, has established New York City sales offices at 10 East 40th Street. A. M. Tenney Associates, Inc., located at the same address, will continue to act as sales representatives for Eastman acetate rayon and staple fiber. Sales of Tennessee Eastman's plastic, Tenite, and its cellulose esters in the New York area will be in charge of William L. Searles. F. L. Bume will handle the new line of Eastman acetate dyestuffs, and sales of other Tennessee Eastman chemicals in this district, will also be made from the new offices.

Nonisol, a new chemical product of Alrose Chemical Co. of Cranston, R. I., is advanced in a technical bulletin issued by the firm. The chemical nature of the product is described as non-ionic ester type surface active agent. It is further described as miscible with water in all proportions, has a satisfactory stability in dilute organic acids, mild alkali and in metallic salt solution, and is compatible with soaps and other wetting agents. Textile uses claimed for it include its properties as non-foaming wetting agent in presence of salts, dispersant and solubilizer for acetate colors and other dyes, leveling agent for use with vat colors, stripping assistant, water soluble lubricant for slashing, cotton and rayon sizing, softener, desizing and degumming assistant.

BYRD MILLER

WOODSIDE BLDG., GREENVILLE, S. C.

Representing in the Carolinas

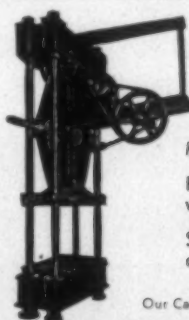
BURKART-SCHIER CHEMICAL CO.

CHATTANOOGA, TENNESSEE



A low cost synthetic organic compound of exceptionally high detergent value. Effective in hard water, acid, or alkaline baths.

BURKART-SCHIER CHEMICAL CO.
CHATTANOOGA, TENNESSEE



Baling Press

Motor Drive, Silent Chain, Center of Screw.

Push Button Control — Reversing Switch with limit stops up and down.

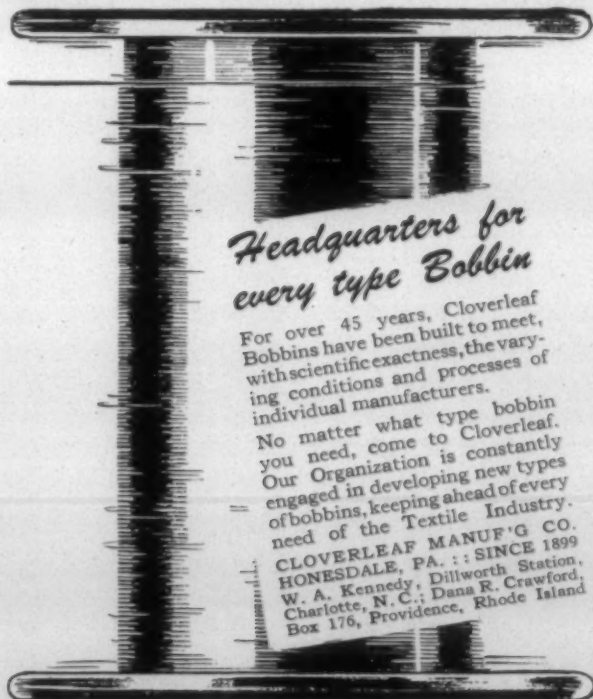
Self Contained. Set anywhere you can run a wire.

Our Catalogue sent on request will tell you more about them

DUNNING & BOSCHERT PRESS CO., Inc.

328 West Water Street

SYRACUSE, N. Y.



Headquarters for every type Bobbin

For over 45 years, Cloverleaf Bobbins have been built to meet, with scientific exactness, the varying conditions and processes of individual manufacturers.

No matter what type bobbin you need, come to Cloverleaf. Our Organization is constantly engaged in developing new types of bobbins, keeping ahead of every need of the Textile Industry.

CLOVERLEAF MANUF'G CO.
HONESDALE, PA. :: SINCE 1899
W. A. Kennedy, Dillworth Station,
Charlotte, N. C.; Dana R. Crawford,
Box 176, Providence, Rhode Island

CLOVERLEAF
Bobbins

SOUTHERN SOURCES OF SUPPLY

FOR EQUIPMENT, PARTS, MATERIAL, SERVICE

Following are the addresses of Southern plants, warehouses, offices, and representatives of manufacturers of textile equipment and supplies who advertise regularly in TEXTILE BULLETIN. We realize that operating executives are frequently in urgent need of information, service, equipment, parts and materials, and believe this guide will prove of real value to our subscribers.

ABINGTON TEXTILE MACHINERY WORKS, Abington, Mass. Offices at Boston, Mass., and Charlotte, N. C.

ACME MACHINE & TOOL CO., 2516 Wilkinson Blvd., Charlotte, N. C.

ACME STEEL CO., 2838 Archer Ave., Chicago, Ill. Sou. Office and warehouse, 603 Stewart Ave., S. W., Atlanta, Ga.; F. H. Webb, Dist. Mgr. Sou. Sales Reps.: C. A. Carrell, 523 Clairmont Ave., Decatur, Ga.; Phone Dearborn 6267; Marcus M. Brown, 1231 Lexington Ave. (Phone 8583), Charlotte, N. C.; William O. Polley, 937 Cherokee Lane, Signal Mountain, Tenn.; Phone Chattanooga 8-2635; John C. Brill, 309 Magazine St., New Orleans, La.; Phone Magnolia 5859. Warehouses at Atlanta, Ga.; Greenville, S. C.; New Orleans, La.

AKRON BELTING CO., THE, Akron, O. Sou. Reps.: Ralph Gossett and Wm. J. Moore, 15 Augusta St., Greenville, S. C.; The Akron Belting Co., 406 S. 2nd St., Memphis, Tenn.

ALLADDIN LABORATORIES, INC., 68 William St., New York 5, N. Y. Sou. Repr.: J. W. Baldwin, 124 E. Third St., Charlotte, N. C. Phone 3-2252.

ALLEN CO., THE, 440 River Road, New Bedford, Mass. Sou. Repr.: L. E. Wooten, Fort Mill, S. C.

AMERICAN BLOWER CORP., P. O. Box 58, Roosevelt Park Annex, Detroit, Mich.; 7 N. 6th St., Richmond, Va.; 1211 Commercial Bank Bldg., Charlotte, N. C.; Room 714, 101 Marietta St. Bldg., Atlanta, Ga.; Room 309, Jahncke Bldg., 816 Howard Ave., New Orleans, La.; 619 Texas Bank Bldg., Dallas, Tex.; 312 Keller Bldg., Houston, Tex.

AMERICAN CYANAMID & CHEMICAL CORP., 30 Rockefeller Plaza, New York City. Sou. Office and Warehouse, Wilkinson Blvd., Charlotte, N. C.; Hugh Puckett, Sou. Sales Mgr. Reps.: John D. Hunter, E. H. Driver, Paul F. Hadcock, Charlotte Office; E. J. Adams, 1404 S. 22nd St., Birmingham, Ala.; Jack B. Button, 610 N. Mendenhall St., Greensboro, N. C.; O. B. Suttle, Jr., 423 Clairmont Ave., Decatur, Ga.; K. E. Youngchild, 10 South St., Mobile, Ala. **AMERICAN CYANAMID CO.**, Textile Resin Dept., Bound Brook, N. J. Sou. Reps.: J. E. Moore, Mgr., Walter Knoepfel, Repr., 3333 Wilkinson Blvd., Charlotte, N. C.

AMERICAN MOISTENING CO., Providence, R. I. Sou. Plants, Charlotte, N. C., and Atlanta, Ga.

AMERICAN PAPER TUBE CO., Woonsocket, R. I. Sou. Office: 513 South Tryon St., Charlotte, N. C.; Jesse Hodges, Sou. Repr.

AMERICAN VISCOSUE CO., 350 Fifth Ave., New York City. Sou. Office, Johnston Bldg., Charlotte, N. C.; Harry L. Dalton, Mgr.

ARKANSAS CO., INC., P. O. Box 210, Newark, N. J. Sou. Repr.: Jasper M. Brown, 1204 Greenwood Cliff, Charlotte, N. C.

ARMOUR & CO., Armour Soap Works, 1355 West 31st St., Chicago 9, Ill. Dist. Divisional Offices: Armour & Co., P. O. Box 2664, Birmingham, Ala.; Armour & Co., 1816 Liberty Life Bldg., Charlotte, N. C.; Armour & Co., Jacksonville, Fla.; Armour & Co., Room 601, Chesapeake & Ohio Bldg., Huntington, W. Va.

ARMSTRONG CORK CO., Industrial Div., Textile Products Section, Lancaster, Pa. Sou. Office, 33 Norwood Place, Greenville, S. C.; J. V. Ashley, Sou. Dist. Mgr.

ARNOLD, HOFFMAN & CO., INC., Providence, R. I. Sou. Headquarters, 2130 N. Tryon St., Charlotte, N. C.; W. Chester Cobb, Sou. Sales Mgr.; Walter T. Bunce, Plant Mgr., Phone 2-4073; Technical Service Men: Reid Tull, 116 W. Thomas St., Salisbury, N. C.; Phone 1497-J; W. L. Mills and Philip L. Lavoie, 2130 N. Tryon St., Charlotte, N. C.; John H. Graham, P. O. Box 904, Greenville, S. C.; Phone 2922; John R. Brown, P. O. Box 749, Trussville, Ala.; Phone 127; Warehouse and Sou. Mfg. Plant, 2130 N. Tryon St., Charlotte, N. C.

ASHWORTH BROS., INC., Charlotte, N. C. Sou. Offices, 44-A Norwood Place, Greenville, S. C.; 215 Central Ave., S. W., Atlanta, Ga.; Texas Rep.: Textile Supply Co., Dallas, Tex.

BAHNSON CO., THE, 1001 S. Marshall St., Winston-Salem, N. C.; 886 Drewery St., Atlanta, Ga.

PANCROFT BELTING CO., Boston, Mass. Warehouse and Sou. Distributor, Carolina Supply Co., Greenville, S. C.

BARBER-COLMAN CO., Rockford, Ill. Sou. Office, 31 W. McBee Ave., Greenville, S. C.; J. H. Spencer, Mgr.

BARIUM REDUCTION CORP., S. Charleston, W. Va. Sou. Distributors: American Cyanamid & Chemical Corp.; F. H. Ross & Co., Charlotte, N. C.

BARKLEY MACHINE WORKS, Gastonia, N. C.

BARNES TEXTILE ASSOCIATES, INC., 10 High St., Boston, Mass. Sou. Office, 318 Montgomery Bldg., Spartanburg, S. C.

BECCO SALES CORP., Buffalo, N. Y. Sou. Reps.: J. D. Quern and D. S. Quern, 1930 Harris Road, Charlotte, N. C.

BEST & CO., INC. EDWARD H., Boston, Mass. Sou. Rep.: W. C. Hames, 185 Pinecrest Ave., Decatur, Ga.; Phone Dearborn 5974; Ralph Gossett, William J. Moore, 15 Augusta St., Greenville, S. C.; Phone 150.

BOND CO., CHAS., 617 Arch St., Philadelphia, Pa. Sou. Reps.: Harold C. Smith, Greenville, S. C.; J. Ernest Brecht, P. O. Box 2023, Atlanta 1, Ga.

BORNE SCRYMSEY CO., Works and Offices, 632 S. Front St., Elizabeth, N. J. Warehouse, 815 W. Morehead St., Charlotte, N. C. Sou. Mgr.: Russell C. Young; Repr.: John Ferguson, LaGrange, Ga.

BROWN CO., THE DAVID, Lawrence, Mass. Sou. Reps.: Greenville, S. C., Ralph Gossett and Wm. J. Moore; Griffin, Ga., Belton C. Plowden; Dallas, Tex., Russell A. Singleton Co., Inc.; Gastonia, N. C., Gastonia Mill Supply Co.; Spartanburg, S. C., Montgomery & Crawford.

BURKART-SCHIER CHEMICAL CO., Chattanooga, Tenn. Plants: Chattanooga-Knoxville-Nashville; Sales and Service: C. A. Schier, A. S. Burkart, W. A. Bentel, W. J. Kelly, Jr., George S. McCarty, A. J. Kelly, D. H. Gunther, care of Burkart-Schier Chemical Co., Chattanooga, Tenn.; H. V. Wells, care of Burkart-Schier Chemical Co., Nashville, Tenn.; Lawrence Newman, care of Burkart-Schier Chemical Co., Knoxville, Tenn.; James A. Brittain, 3526 Cliff Road, Birmingham, Ala.; Nelson A. Fisher, 629 Hillside Ave., Glen Ellyn, Chicago, Ill.; Byrd Miller, Woodside Bldg., Greenville, S. C.

BUTTERWORTH & SONS CO., H. W., Philadelphia, Pa. Sou. Rep.: J. H. Zahn, Johnston Bldg., Charlotte, N. C.

CAROLINA REFRACTORIES CO., Hartsville, S. C.

CARTER TRAVELER CO., Gastonia, N. C. R. D. Hughes Sales Co., 1812 Main St., Dallas, Tex., Texas and Arkansas; Eastern Rep. (including Canada): C. E. Herrick, 44 Franklin St., Providence, R. I.; European Rep.: Mellor, Bromley & Co., Ltd., Leicester, England.

CHARLOTTE CHEMICAL LABORATORIES, INC., Charlotte, N. C. Peter S. Gilchrist, Jr., Rep.

CHARLOTTE LEATHER BELTING CO., 314 E. 6th St., Charlotte, N. C. Sales Reps.: J. E. Bestie, P. O. Box 82, Greenville, S. C.; J. L. Harkey and P. L. Pindell, Charlotte Office.

CIBA CO., INC., Greenwich and Morton Sts., New York City. Sou. Offices and Warehouses, Charlotte, N. C.

CLINTON CO., Clinton, Iowa. Sou. Reps.: Luther Knowles, Box 127, Phone 2-2486, Charlotte, N. C.; Grady Gilbert, Box 342, Phone 3192, Concord, N. C.; Clinton Sales Co., Inc., Geo. B. Moore, Box 481, Phone 822, Spartanburg, S. C., and 900 Woodside Bldg., Greenville, S. C.; Phone 3713; Boyce L. Estes, Box 132, LaGrange, Ga. Stocks carried at Carolina Transfer & Storage Co., Charlotte, N. C.; Consolidated Brokerage Co., Greenville, S. C.; Bonded Service Warehouse, Atlanta, Ga.; Textile Products Distributing Co., Rock Hill, S. C.; Industrial Chemicals, Roanoke, Rapids, N. C.

COLE MFG. CO., R. D., Newman, Ga.

COLUMBIA SUPPLY CO., Columbia, S. C.

CORN PRODUCTS REFINING CO., 17 Battery Place, New York City. Corn Products Sales Co., Southeastern Bldg., Greensboro, N. C.; W. Rouse Joyner, Mgr.; Corn Products Sales Co., Montgomery Bldg., Spartanburg, S. C.; Corn Products Sales Co., Woodside Bldg., Greenville, S. C.; J. Alden Simpson, Mgr.; Corn Products Sales Co. (Mill and Paper Starch Div.), Hurt Bldg., Atlanta, Ga.; J. Cantey Alexander, Mgr.; Corn Products Sales Co., Comer Bldg., Birmingham, Ala.; L. Hawley Kelley, Mgr. Stocks carried at convenient points.

CROMPTON & KNOWLES LOOM WORKS, Worcester, Mass. Sou. Offices and Plant: 1505 Hutchinson Ave., Charlotte, N. C.

CURTIS & MARBLE MACHINE CO., 72 Cambridge St., Worcester, Mass. Sou. Reps.: Greenville, S. C., 1000 Woodside Bldg., W. F. Woodward, Tel. 3336; Dallas, Tex., O. T. Daniels, care Textile Supply Co.; New York, N. Y., 200 Fifth Ave., F. C. Bryant.

DARY RING TRAVELER CO., Taunton, Mass. Sou. Rep.: John E. Humphries, P. O. Box 843, Greenville, S. C.; John H. O'Neill, P. O. Box 720, Atlanta, Ga.; H. Reid Lockman, P. O. Box 515, Spartanburg, S. C.

DAYTON RUBBER MFG. CO., Dayton, O. Sou. Reps.: J. O. Cole, P. O. Box 846, Greenville, S. C.; Kenneth Karns, P. O. Box 846, Greenville, S. C.; Thomas W. Meighan, 1364 Middlesex Ave., N.E. Atlanta, Ga.; T. A. Sizemore, 325 Grove St., Salisbury, N. C. Sou. Jobbers: Greenville Textile Supply Co., Greenville Belting Co., Greenville, S. C.; Textile Mill Supply Co., Charlotte, N. C.; Odell Mill Supply Co., Greensboro, N. C.; Young & Vann Supply Co., Birmingham, Ala.; Industrial Supply, Inc., LaGrange, Ga.; Textile Supply Co., Dallas, Tex.

DENISON MFG. CO., THE, Plant and Sales Offices, Asheville, N. C. Sou. Service Rep.: L. C. Denison, P. O. Box 4072, Asheville, N. C.

DRAPER CORPORATION, Hopedale, Mass. Rhode Island Warp Stop Equipment Branch, Pawtucket, R. I. Sou. Offices and Warehouses, Spartanburg, S. C.; Clare H. Draper, Jr.; Atlanta, Ga., 242 Forsyth St., S.W., W. M. Mitchell.

DU PONT DE NEMOURS & CO., INC., E. I., Electrochemicals Dept., Main Office, Wilmington, Del.; Charlotte Office, 414 S. Church St., LeRoy Kennette, Dist. Sales Mgr. Reps.: J. L. Moore, Technical Man; N. P. Arnold, 2386 Alston Dr., Atlanta, Ga., Technical Service Man; O. S. McCullers, 208 McPherson Lane, Greenville, S. C., Tech. Rep.

EATON, PAUL B., 218 Johnston Bldg., Charlotte, N. C.

EMMONS LOOM HARNESS CO., Lawrence, Mass. Sou. Plant, 118½ W. Fourth St., Charlotte, N. C.; George A. Field, Mgr.; Clifton E. Watson, Mgr. Sou. Sales, Arthur W. Harris, Harris Mfg. Co., Agt., P. O. Box 1982, Phone Main 2643, Atlanta, Ga.; R. D. Hughes Sales Co., 1812 Main St., Dallas 1, Tex.

ENGINEERING SALES CO., 217 Builders' Bldg., Charlotte, N. C., and Allen Bldg., Greenville, S. C.; S. R. and V. G. Brookshire.

FAFNIR BEARING CO., New Britain, Conn. District Warehouse, 248 Spring St., N.W., Atlanta, Ga. A. G. Loughridge, Ga. and Ala. Rep.: Stanley D. Berg, 321 N. Caswell Rd., Charlotte, N. C., Carolinas Rep.

FIDELITY MACHINE CO., 3908-18 Frankford Ave., Philadelphia, Pa. Sou. Rep.: R. C. Aycock, 911 Provident Bldg., Chattanooga, Tenn.

FOSTER MACHINE CO., Westfield, Mass. Sou. Offices, 509 Johnston Bldg., Charlotte, N. C.



*Wets, penetrates, suspends, disperses, aids
detergents and dyes, cuts time and costs.*

**BURKART-SCHIER CHEMICAL CO.
CHATTANOOGA, TENNESSEE**

COOLING — VENTILATING

MOISTENING — HEATING

HUMIDIFYING INSTALLATIONS

ENGINEERING AND SERVICE

INDUSTRIAL

COOLING & MOISTENING CO., INC.

PHONE 7719 - - - - - CHARLOTTE, N. C.



PATENTED

PLUSH COVERED SCAVENGER ROLLS

*Pick up better, strip easier, will keep flutes
clean, last longer. Ply lays in opposite
direction from center to facilitate stripping.*

Fully Covered by Patent No. 2,234,779 and Manufactured Exclusively by

E. F. ROSE & COMPANY • Maiden, N. C.

PACKAGE DYEING AND BLEACHING

All Type Colors on Cotton Yarns

PIEDMONT PROCESSING CO., Belmont, N. C.

TEXTILE FINISHES
for COTTON, RAYONS and MIXTURES

TEXTILE OILS — HEAVY CHEMICALS

Charlotte Chemical Laboratories, Inc.
Charlotte, North Carolina Founded 1914

PAGE

**LEATHER
BELTING**



**FLAT, ROUND
LINK & VEE**

*Made from the finest
selection of belting hides*

Especially constructed for all types of loom drives

PAGE BELTING CO.

CONCORD, N. H., U. S. A.

**Sterling
Ring Travelers**

TWISTERS

Twister Travelers should fit
rings and conditions. If you
change work or are not sat-
isfied, send a ring and tell
us of these conditions.

Southern Representatives

D. J. QUILLEN
Box 443, Spartanburg, S. C.

D. C. ANDERSON
Box 629, Cedartown, Ga.

STERLING RING TRAVELER CO.
FALL RIVER, MASS.

FOXBORO CO., THE, 82 Neponset Ave., Foxboro, Mass. Sou. Reprs.: W. W. Barron, The Foxboro Co., 101 Marietta St. Bldg., Atlanta 3, Ga.; B. C. Alexander, The Foxboro Co., 2012 E. 7th St., Charlotte, N. C.; G. E. Clark, The Foxboro Co., 201 Tuscany Road, Baltimore 10, Md.; E. L. Stark, The Foxboro Co., 1710 N. Akard St., Dallas 1, Tex.; L. W. Parten, The Foxboro Co., 608 Fannin St., Houston 2, Tex.; W. A. Rock, The Foxboro Co., P. O. Box 1956, Corpus Christi, Tex.; David Warriner, The Foxboro Co., 7920 Zimble St., New Orleans 18, La.

FRANKLIN PROCESS CO., Providence, R. I. Sou. Plants, Southern Franklin Process Co., Greenville, S. C.; Central Franklin Process Co., Chattanooga, Tenn.

GASTONIA BRUSH CO., Gastonia, N. C.

GATES RUBBER CO., Denver 17, Colo. Sales Offices and Warehouses at 605 W. Fifth St., Charlotte, N. C.; 801-2 Liberty National Life Bldg., Birmingham, Ala.; 110 Milby St., Houston, Tex.; 1710 N. Market St., Dallas, Tex. Sales Office at 521-523 C. & S. National Bank Bldg., Atlanta, Ga.

GENERAL COAL CO., 1217 Johnston Bldg., Charlotte, N. C. J. W. Lassiter, Sou. Sales Mgr. Reprs.: H. O. Thompson, 21 Sylvan Ave., Asheville, N. C.; Guy H. Sowards, 2011 Fairview Road, Raleigh, N. C.; Hugh D. Brower, 2715 Lenox Road, Atlanta, Ga.; W. A. Counts, Res. Mgr., Law and Commerce Bldg., Bluefield, W. Va.; Dave B. Smith, Charlotte, N. C. Combustion Engineer, E. H. Chapman, Charlotte, N. C.

GENERAL DYESTUFF CORP., 435 Hudson St., New York City. Sou. Office and Warehouse, 2459 Wilkinson Blvd., Charlotte, N. C.; S. H. Williams, Mgr.

GILL LEATHER CO., Salem, Mass. Sou. Reprs.: Belton C. Plowden, Griffin, Ga., Tel. 3157; Mrs. W. C. Hamner, Gastonia, N. C., Tel. 229; Ralph Gossett, 15 Augusta St., Greenville, S. C., Tel. 130; Wm. J. Moore, P. O. Box 1523, Greenville, S. C., Tel. 150.

GRATON & KNIGHT CO., Worcester 4, Mass. Sou. Reprs.: D. A. Ahlstrand, S. E. Dist. Mgr., P. O. Box 4028, Atlanta, Ga.; W. F. McAnulty, 1240 Roman Road, Charlotte 3, N. C., Phone 3-9573; F. W. Tiadell, P. O. Box 4028, Atlanta, Ga., Phone; P. T. Pinckney, Jr., Route 2, Germantown, Tenn., Phone 9. Sou. Distributors: Hugh Black, Woodside Bldg. Annex, Greenville, S. C.; The Cameron & Barkley Co., 160 Meeting St., Charleston, S. C.; Columbus Iron Works Co., 901 Front St., Columbus, Ga.; The Textile Mill Supply Co., 1390 S. Mint St., Charlotte, N. C.; Arkansas Mill Supply Co., Inc., Fourth and Louisiana Sts., Pine Bluff, Ark.; Buhrman-Pharr Hardware Co., Texarkana, Ark.; Keith-Simmons Co., Inc., Cummins Station, Nashville, Tenn.; McGowin-Lyons Hardware & Supply Co., 113-125 N. Water St., Mobile, Ala.; Henry A. Pettey Supply Co., 101-214 S. First St., Paducah, Ky.; Southern Supply Co., E. Orleans St., Jackson, Tenn.; Lewis Supply Co., Helena, Ark.; Standard Supply & Hardware Co., 822 Tchoupitoulas St., New Orleans, La.; Weeks Supply Co., Fourth and Jefferson Sts., Monroe, La.; Battery Machinery Co., 100-120 N. Second Ave., Rome, Ga.; The Cameron & Barkley Co., 605 E. Forsyth St., Jacksonville, Fla.; The Cameron & Barkley Co., 6107 S. Franklin St., Tampa, Fla.; Fulton Supply Co., 342 Nelson St., Atlanta, Ga.; Sharp Battery & Electric Co., Broad and Fourth St., Chattanooga, Tenn.; Tennessee Mill & Mine Supply Co., 406-12 State St., Knoxville, Tenn.; The Young & Vann Supply Co., 1725 First Ave., Birmingham, Ala.; Lewis Supply Co., 477 S. Main St., Memphis, Tenn.

GREENSBORO LOOM REED CO., Greensboro, N. C. Phone 5678. Geo. A. McFetters, Mgr., Phone 2-0205; W. P. (Bill) Anderson.

GREENVILLE BELTING CO., Greenville, S. C.

GREENVILLE TEXTILE MILL SUPPLY CO., Greenville, S. C.

GULF OIL CORPORATION OF PA., Pittsburgh, Pa. Division Offices: Atlanta, Ga. A. M. Wright, Greenville, S. C.; W. G. Robertson, Jr., Spartanburg, S. C.; J. H. Hooten, Gastonia, N. C.; R. G. Burkhalter, Charlotte, N. C.; G. P. King, Jr., Augusta, Ga.; Boston, Mass.; New York, N. Y.; Philadelphia, Pa.; New Orleans, La.; Houston, Tex.; Louisville, Ky.; Toledo, O.

H & B AMERICAN MACHINE CO., Pawtucket, R. I. Sou. Offices, 815 The Citizens and Southern National Bank Bldg., Atlanta, Ga.; J. C. Martin, Agt.; Johnston Bldg., Charlotte, N. C.; Elmer J. McVey, Mgr.; Fritz Swiefl, Fred Dickinson, Jim Miller, Sales and Service Representatives.

HENLEY PAPER CO. (formerly Parker Paper Co.) Headquarters and Main Warehouse, High Point, N. C.; Warehouses and Sales Divisions: Charlotte, N. C.; Asheville, N. C.; Gastonia, N. C.

HERSEY, HENRY H., 44 Norwood Place, Greenville, S. C. Selling Agent for A. C. Lawrence Leather Co. and New England Bobbin & Shuttle Co.

HOUGHTON & CO., E. F., 303 W. Lehigh Ave., Philadelphia 33, Pa. Sou. Reprs.: W. H. Brinkley, Gen. Sales Mgr., Sou. Div. 1301 W. Morehead St., Charlotte, N. C., Tel. 3-2916. Sou. Reprs.: L. L. Brooks, 23 Jones Ave., Greenville, S. C., Tel. 4856-J; J. W. Byrnes, 701 N. San Jacinto St., Houston 2, Tex., Tel. Jackson 2-7443; C. L. Elgert, 300 Chesapeake Bank Bldg., 7 St. Paul St., Baltimore, Md., Tel. Saratoga 2388; T. E. Hansen, Rt. No. 2, Box 398, Glen Allen, Va., Tel. 5-1620; J. J. Reilly, 2788 Peachtree Rd., N.E., Apt. 6-B, Atlanta, Ga., Tel. Cherokee 7660; V. C. Shadden, P. O. Box 935, Chattanooga, Tenn.; O. G. Schultze, 1301 W. Morehead St., Charlotte, N. C., Tel. 3-2916; S. P. Schwoyer, P. O. Box 1507, or 302½ Otteray Drive, High Point, N. C., Tel. 3654; J. W. Butler, 1301 W. Morehead St., Charlotte, N. C., Tel. 3-2916; W. C. McMann, 1301 W. Morehead St., Charlotte, N. C., Tel. 3-2916; H. J. Reid, 212 Lamont Drive, Decatur, Ga., Tel. Dearborn 4564.

HOUGHTON WOOL CO., THE, 258 Summer St., Phone Liberty 1875, Boston, Mass. Sou. Rep.: Jas. E. Taylor, P. O. Box 2084, Phone 3-3692, Charlotte, N. C.

HOWARD BROS. MFG. CO., 44-46 Vine St., Worcester, Mass. Sou. Offices and Plants, 244 Forsyth St., S.W., Atlanta, Ga.; Guy L. Melchor, Sou. Agent; J. Floyd Childs, 219-223 S. Linwood St., Gastonia, N. C.; Carl M. Moore, Agent; Southwestern Rep.: Russell A. Singleton Co., Inc., 718 Brown Bldg., Austin, Tex.

IDEAL MACHINE CO., Bessemer City, N. C.

INDUSTRIAL COOLING & MOISTENING CO., 1440-44 S. Tryon St., Charlotte 3, N. C., G. A. White.

INDUSTRIAL RAYON CORP., Cleveland, O. Sou. Reprs.: J. H. Mason, P. O. Box 897, Greensboro, N. C.; W. L. Jackson, 900 Woodside Bldg., Greenville, S. C.

JACOBS MFG. CO., THE E. H., Danielson, Conn., and Charlotte, N. C. Sou. Executive, W. Irving Bullard, Pres., Charlotte, N. C.; Sou. Sales Mgr., S. B. Henderson, P. O. Box 133, Greer, S. C.; Sou. Rep.: William P. Russell, Box 778, Atlanta, Ga.; Sou. Subsidiary, The E. H. Jacobs Mfg. Corp., Box 3096, Charlotte, N. C. Sou. Distributors: Odell Mill Supply Co., Greensboro, N. C.; Textile Mill Supply Co., Charlotte, N. C.; Charlotte Supply Co., Charlotte, N. C.; Gastonia Mill Supply Co., Gastonia, N. C.; Shelby Supply Co., Shelby, N. C.; Sullivan Hardware Co., Anderson, S. C.; Montgomery & Crawford, Inc., Spartanburg, S. C.; Carolina Supply Co., Greenville, S. C.; Greenville Textile

Supply Co., Greenville, S. C.; Fulton Supply Co., Atlanta, Ga.; Southern Belting Co., Greenville, S. C.; Southern Belting Co., Atlanta, Ga.; The Young & Vann Supply Co., Birmingham, Ala.

JARRETT & CO., CECIL H., P. O. Box 647, Newton, N. C.

JENKINS METAL SHOP, Gastonia, N. C.

JOHNSON CHEMICAL CO., Statesville Ave., Phone 6450, Charlotte, N. C. P. O. Box 1418. Stephen J. Hawes, Staton F. Peel, Jr.

JORDAN MFG. CO., W. H. & F., JR., 2126 E. Somerset St., Philadelphia 34, Pa. Sou. Rep.: E. B. Wheeler, P. O. Box 501, Charlotte 1, N. C.

KEARNY MFG. CO., INC., Kearny, N. J. (Hygrolit). Sou. Plant and Offices, Greenville, S. C.; W. O. Slimback, Mgr. Sou. Reprs.: Harold Mahon, Greensboro, N. C.; Wm. P. Russell, Atlanta, Ga.; Russell A. Singleton, Austin, Tex.

KEEVER STARCH CO., Columbus, O. Sou. Office, 1200 Woodside Bldg., Greenville, S. C.; Claude B. Iler, Mgr. Sou. Warehouses: Greenville, S. C.; Charlotte, N. C. Sou. Reprs.: C. C. Switzer, Greenville, S. C.; Luke J. Castile, 924 Monticello Terrace, Charlotte, N. C.; F. M. Wallace, Homewood, Birmingham, Ala.

KEYSTONE BELTING CO., 213 N. Third St., Philadelphia, Pa. Sou. Rep.: T. J. Digby, Jr., P. O. Box 244, Greer, S. C.

LAMBRETH ROPE CORP., New Bedford, Mass. Frank Burke, Phone 3-4287, Charlotte, N. C.; J. P. O'Leary, Phone 4082-M, Greenville, S. C.

LANDIS, OLIVER D., 718 Queens Road, Charlotte 4, N. C.

LAUREL SOAP MFG. CO., INC., 2607 E. Tioga St., Philadelphia, Pa. Sou. Reprs.: A. Henry Gaede, P. O. Box 1083, Charlotte, N. C.; W. R. Sargent, P. O. Box 1044, Greenville, S. C.

LAWRENCE LEATHER CO., A. C., Peabody, Mass. Henry W. Hersey, Selling Agent, 444 Norwood Place, Greenville, S. C.

LOPER CO., RALPH E., 500 Woodside Bldg., Greenville, S. C. New England Office, Buffington Bldg., Fall River, Mass.

MAGUIRE & CO., JOHN P., 370 Fourth Ave., New York City. Sou. Rep.: Taylor R. Durham, Liberty Life Bldg., Charlotte, N. C.

MARQUETTE METAL PRODUCTS CO., Cleveland, O. Sou. Rep.: Byrd Miller, Woodside Bldg., Greenville, S. C.

MATHIESON ALKALI WORKS, INC., THE, 60 E. 42nd St., New York City. Southeastern Dist. Sales Office: Liberty Life Bldg., Charlotte, N. C.; Fred O. Tilson, Sou. Dist. Sales Mgr. Reprs.: R. C. Staples, Z. N. Holler, Frank Thomas, John Staples, Vernon Woodruff, Harold Dinges.

MEADOWS MFG. CO., P. O. Box 4354, Atlanta, Ga.

MERROW MACHINE CO., THE, 8 Laurel St., Hartford, Conn. Hollister-Moreland Co., P. O. Box 721, Spartanburg, S. C.

MILL DEVICES CO., Gastonia, N. C. R. D. Hughes Sales Co., 1812 Main St., Dallas, Tex., Texas and Arkansas; Eastern Rep. (including Canada), C. E. Herrick, 44 Franklin St., Providence, R. I.; European Rep.: Mellor, Bromley & Co., Ltd., Leicester, England.

MILLER, BYRD, Manufacturers' Agent, Woodside Bldg., Greenville, S. C.

MIXING EQUIPMENT CO., INC., Rochester, N. Y. Sou. Reprs.: R. E. Mason, 617 Johnston Bldg., Charlotte 1, N. C.; Edgar A. Rogers, Chattanooga Bank Bldg., Chattanooga 2, Tenn.; M. N. Dannenbaum Co., 2421 S. Wayside Drive, Houston 12, Tex.; D. A. Warriner, 7920 Zimble St., New Orleans 18, La.

NATIONAL ANILINE DIVISION, Allied Chemical & Dye Corp. Gen. Office, 40 Rector St., New York City. Julian T. Chase, Res. Mgr., 201 W. First St., Charlotte, N. C.; Kenneth Mackenzie, Asst. to Res. Mgr., 201 W. First St., Charlotte, N. C. Salesmen: W. L. Barker, R. B. Murdoch, Harry L. Shinn, Geo. A. Artope, 201 W. First St., Charlotte, N. C.; J. H. Shuford, Jefferson Standard Bldg., Greensboro, N. C.; H. A. Rodgers, 1202 James Bldg., Chattanooga, Tenn.; J. I. White, American Savings Bank Bldg., Atlanta, Ga.; W. H. Jackson, Apt. 10-A, Country Club Apts., Columbus, Ga.; A. Jones, Jr., 806 Masonic Temple Bldg., New Orleans, La.

NATIONAL RING TRAVELER CO., 354 Pine St., Pawtucket, R. I. Sou. Office and Warehouse, 131 W. First St., Charlotte, N. C. Sou. Agt.: L. E. Taylor, Charlotte, N. C. Sou. Reprs.: Otto Pratt, Union Mills, N. C.; H. B. Askew, P. O. Box 221, Griffin, Ga.

NATIONAL STARCH PRODUCTS, INC., 270 Madison Ave., New York 16, N. Y. Sou. Reprs.: Seth A. Meek, P. O. Box 364, Newberry, S. C., Tel. 216; Raymond T. Clarke, 226 Waccamaw Ave., Greenville, S. C., Tel. 6432-W.

NEW ENGLAND BOBBIN & SHUTTLE CO., Nashua, N. H. Sou. Reprs.: Charlotte Supply Co., Charlotte, N. C.; Mrs. W. G. Hamner, Box 26, Gastonia, N. C.; Arthur W. Harris, 443 Stonewall St., S.W., Atlanta, Ga.; Henry H. Hersey, Norwood Place, Greenville, S. C.

N. Y. & N. J. LUBRICANT CO., 292 Madison Ave., New York City. Sou. Office, 1000 W. Morehead St., Phone 3-7191, Charlotte, N. C. Spartanburg, S. C., Atlanta, Ga., Greenville, S. C. Falls L. Thomason, Sou. Dist. Mgr.

NOBLE, ROY, New Bedford, Mass. Sou. Rep.: John P. Batson, P. O. Box 841, Greenville, S. C.

NORLANDER-YOUNG MACHINE CO., New Bedford, Mass. Sou. Plant, York Road, Gastonia, N. C.

ODELL MILL SUPPLY CO., Greensboro, N. C.

PARST SALES CO., 221 N. LaSalle St., Chicago 1, Ill. Sou. Repr.: C. H. Patrick, P. O. Box 300, Salisbury, N. C., Phone 1066. Sou. Warehouse, Textile Warehouse Co., Greenville, S. C.

PAGE BELTING CO., INC., P. O. Box 482, Concord, N. H. Sou. Repr.: William M. Virgin, 3410 Alta Vista Dr., Chattanooga, Tenn., Phone 2-8457, Special Repr.: L. Robert B. Rowland, P. O. Box 1313, Greenville, S. C., Phone 1302. Distributors: Dillon Supply Co., 5 West St., Raleigh, N. C.; Dillon Supply Co., Church St., Durham, N. C.; Dillon Supply Co., 5 Church St., Rocky Mount, N. C.; Dillon Supply Co., E. Mulberry St., Goldsboro, N. C.; Chattanooga Belting & Supply Co., 1221-1225 Market St., Chattanooga 1, Tenn.

PARKS-CRAMER CO., Plants at Fitchburg, Mass., and Charlotte, N. C. Atlanta Office, Bona Allen Bldg.

PEACH & CO., D. W., Gastonia, N. C. D. W. Peach.

PEASE & Co., 119½ E. Fifth St., Charlotte, N. C.

CREAMSOL

TEXTILE SOFTENER

Creamsol . . . concentrated stearic Softener . . .
Ideal for Bleached Goods but an excellent all-around Softener . . . Imparts Soft, Pleasing Handle.

BURKART-SCHIER CHEMICAL CO.
CHATTANOOGA, TENNESSEE

Established 1838

MERROW

High Speed Overedging,
Overseaming and Hem-
ming Machines for Use
on Knitted and Woven
Wear of All Kinds.

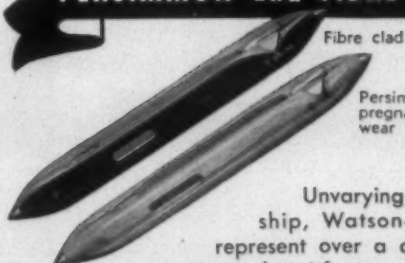
Quality Results
— High Produc-
tion — Conven-
ient Handling —
Minimum Time
Out for Adjust-
ment and Re-
pair — Low Up-
keep Costs.

For Best Results Use a Machine Suitably Arranged for Your Work.

The MERROW MACHINE COMPANY

2802 Laurel Street Distributors Hartford 6, Conn.
Hollister-Moreland Co., P. O. Box 721, Spartanburg, S. C.

PERSIMMON and FIBRE SHUTTLES



Unvarying in fine workman-
ship, Watson-Williams Shuttles
represent over a century of develop-
ment and satisfactory operation.

WATSON-WILLIAMS MFG. CO., Millbury, Mass.

SOUTHERN REPRESENTATIVES: John W. Littlefield, 810 Woodside Bldg.,
Greenville, S. C.; Walter F. Daboll, 703 Jefferson Bldg., Greensboro, N. C.



A PLASTIC LINING USED IN PLACE OF FIRE BRICK



LONGER LASTING BOILER FURNACES

"Boiler furnaces lined with CARECO last two to four times longer than those lined with fire brick. Write for quotation."

CAROLINA REFRACTORIES CO
Hartsville, S. C.

Looking to the future
with a proud past . . .

Ray Chemical Co.

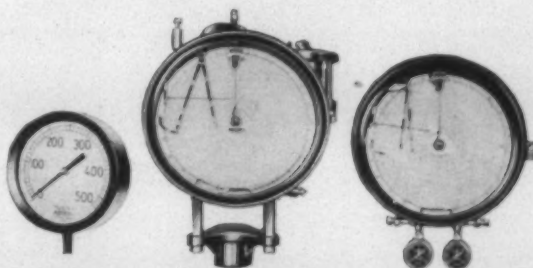
Charlotte, N. C.



Tested and Approved

TEXTILE OILS
CHEMICALS
AND SOAPS

**Better-Engineered Instruments
for Every Textile Operation**



Designed and built by pioneers of textile instrumenta-
tion, Foxboro Instruments give you unerring guidance and
control of production . . . and keep on giving it for years
without maintenance. Foxboro makes complete lines of
indicators, recorders and controllers for temperature,
pressure, flow, humidity and liquid level. Also special
instrument control systems for:

TEMPERATURE — Efficient automatic control systems for
skein, package and rotary dyeing . . . and for kiers, slash-
ers, dryers and scouring.

PRESSURE — Pneumatic roll-loading systems that improve
uniformity of output from dye padders, mercerizers, etc.

Write for detailed information on the instrumentation
you require. The Foxboro Company, 82 Neponset Ave.,
Foxboro, Mass., U. S. A.

FOXBORO INSTRUMENTS
REG. U. S. PAT. OFF.

FENICK & FORD, LTD., INC., 420 Lexington Ave., New York City; Cedar Rapids, Iowa, P. O. Wear, Sou. Sales Mgr., 905 Bona Allen Bldg., Atlanta, Ga.; J. H. Almand, W. J. Kirby, Atlanta Office; C. T. Lassiter, Greensboro, N. C.; Guy L. Morrison, 902 Montgomery Bldg., Spartanburg, S. C. Stocks carried at convenient points.

PIEDMONT PROCESSING CO., Belmont, N. C.

PITTSBURGH PLATE GLASS CO., Columbia Chemical Div., Grant Bldg., Pittsburgh, Pa. Dist. Sales Office, 615 Johnston Bldg., Charlotte, N. C.; James R. Simpson, Dist. Sales Mgr.

PROVIDENT LIFE & ACCIDENT INS. CO. (Group Accident and Health and Welfare Plans Div.), Chattanooga, Tenn. Southeastern Div. Office, 815 Commercial Bank Bldg., Gastonia, N. C.

RAILWAY SUPPLY & MFG. CO., THE, Main Office: 335-37 W. Fifth St., Cincinnati 1, O. Tel. Cherry 7830; Atlanta Office: Erwin Worstman, 888 Marietta St., Atlanta 1, Ga. Tel. Hemlock 1877; Charlotte Office: G. C. Tate and John Vogler, P. O. Box 1088, Charlotte 1, N. C. Tel. 4-1636; Dallas Office: D. F. McKinnon, 3200 Main St., Dallas, Tex., Tel. Central 6413.

RAY CHEMICAL CO., Charlotte, N. C. Sou. Reprs.: Thomas J. Hall, Thomas H. McKenzie, Harry H. Sims, William W. Ray.

RHOADS & SONS, J. E., 35 N. Sixth St., Philadelphia 8, Pa. Sou. Office: J. E. Rhoads & Sons, 88 Forsyth St., S.W., Atlanta, Ga., P. O. Box 4305, C. R. Mitchell, Mgr. Sou. Reprs.: J. Warren Mitchell, P. O. Box 1589, Greenville, S. C.; A. S. Jay, P. O. Box 687, Sylacauga, Ala.; J. T. Hoffman, P. O. Box 4305, Atlanta, Ga.; L. H. Schwoebel, 615 Roslyn Road, Winston-Salem, N. C.; Textile Supply Co., 301 N. Market St., Dallas, Tex.

ROHM & HAAS CO., 222 W. Washington Square, Philadelphia, Pa. Sou. Office: P. H. Del Plaine, Dist. Mgr., 1109 Independence Bldg., Charlotte, N. C., Phone 2-3201; A. K. Haynes, 1811 Meadowdale Ave., N.E., Atlanta, Ga., Phone Atwood 2619.

ROY & SON CO., R. 8, Worcester, Mass. Sou. Office: Box 1045, Greenville, S. C.; Jack Roy, Rep. Sou. Distributors: Odell Mill Supply Co., Greensboro, N. C.; Textile Mill Supply Co., Charlotte, N. C.; Textile Supply Co., Dallas, Tex.

SACO-LOWELL SHOPS, 60 Battery March St., Boston, Mass. Sou. Office and Supply Depot, Charlotte, N. C.; Walter W. Gayle, Sou. Agt.; F. Robbins Lowe and Charles S. Smart, Jr., Selling Agts., Atlanta, Ga.; John L. Graes, Mgr., and Miles A. Comer, Selling Agt.; Greenville, S. C.; H. P. Worth, Selling Agt.

SCOTT TESTERS, INC., 115 Blackstone St., Providence, R. I. Sou. Reprs.: John Klinek, 304 Forest Ave., Augusta, Ga.

SEYDEL-WOOLLEY & CO., 748 Rice St., N.W., Atlanta, Ga. Reprs.: Vasser Woolley, John R. Seydel, E. A. Scott, A. Pate, Atlanta, Ga.; W. L. Whisnant, Concord, N. C. Northern and Export Rep.: Standard Mill Supply Co., 1084-1090 Main St., Pawtucket, R. I. (conditioning machinery and Penetrants only), Southwestern Reprs.: O. T. Daniel, Textile Supply Co., 301 N. Market St., Dallas, Tex.

SHELL OIL CO., INC., 50 W. 50th St., New York 20, N. Y. Div. Office Headquarters: 909 E. 22nd St., Baltimore 18, Md.; B. G. Symon, Mgr., Lubricants Dept., 50 W. 50th St., New York 20, N. Y.; Jay Trexler, Mgr. Industrial Products, Shell Oil Co., Inc., 909 E. 22nd St., Baltimore 18, Md. Phone University 4890; L. A. Gregg, Industrial Repr., 2010 Charlotte Drive, Charlotte 3, N. C., Phone 2-0704; James Lowry, Dist. Mgr., 613 S. Calvert St., Charlotte, N. C.; C. C. Hurst, Dist. Mgr. Shell Oil Co., Inc., Spring Garden St., Ext., Greensboro, N. C.; P. R. Phenix, Dist. Mgr. Shell Oil Co., Inc., Pinckney Court, Spartanburg, S. C.; J. C. Metze, Dist. Mgr., Shell Oil Co., Inc., 700 Blossom St., Columbia, S. C.; Div. Offices: 400 William-Oliver Bldg., Atlanta 3, Ga.; E. R. Boswell, Mgr. Industrial Products, Office and Bulk Depots: Atlanta, Ga.; Birmingham, Ala.; Chattanooga, Tenn.; Houston, Tex.; Jackson, Miss.; Jacksonville, Fla.; Knoxville, Tenn.; Macon, Ga.; Montgomery, Ala.; Nashville, Tenn.; New Orleans, La.

SINCLAIR REFINING CO., Dist. Office, 573 W. Peachtree St., Atlanta, Ga. State Offices: Atlanta, Ga.; Birmingham, Ala.; Jacksonville, Fla.; Columbia, S. C.; Charlotte, N. C.; Nashville, Tenn.; Jackson, Miss. Industrial Reprs.: C. C. Nix, P. O. Box 2111, Birmingham 1, Ala.; L. M. Kay, 332 Eighth St., N.E., Atlanta, Ga.; A. F. Landers, P. O. Box 1605, Lakeland, Fla.; R. R. Boatwright, P. O. Box 4009, Jacksonville 1, Fla.; S. M. Newsom, P. O. Box 31, Tifton, Ga.; J. O. Holt, P. O. Box 5516, State College Sta., Raleigh, N. C.; Marion K. Williams, 2837 Hillsdale Ave., Charlotte, N. C.; J. F. Welch, P. O. Box 756 "E", Columbia, S. C.; P. A. Raiche, P. O. Box 291, Memphis, Tenn.

SIRRIE & CO., J. E., Greenville, S. C.

SLAUGHTER MACHINERY CO., 513 S. Tryon St., Charlotte, N. C.

SLIP-NOT BELTING CORP., Kingsport, Tenn. Sou. Reprs.: E. S. Meservey, 134 McClean St., Decatur, Ga.; Ga. and Ala. Rep.: G. H. Spencer, P. O. Box 1297, Gastonia, N. C.; N. C. Rep.: Jack Alexander, Box 1623, Phone 7777, Charlotte, N. C.; part of N. C. and S. C. Rep.: T. E. Doane, 1421 W. Sullivan St., Kingsport, Tenn.; Tenn. and Va. Rep.: J. D. Cox, V-Pres., Greenville Hotel, Greenville, S. C.; and Kinesport, Tenn.; O. L. ("Blackie") Carter, Box 2206, Phone 2043, Greenville, S. C.

SOCONY-VACUUM OIL CO., INC., Southeastern Div. Office, 1602 Baltimore Trust Bldg., Baltimore, Md. Warehouses: Union Storage Co., 224 W. 1st St., Charlotte, N. C.; Textile Warehouse Co., 511 Rhett St., Greenville, S. C.; South Atlantic Bonded Warehouse Co., Greensboro, N. C.; Columbia Warehouse & Truck Terminal, 903 Pulaski St., Columbia, S. C.; Tennessee District Office: Third National Bank Bldg., Nashville 3, Tenn.; Warehouses: Knoxville, Tenn.; Chattanooga, Tenn.; Nashville, Tenn.; Columbia, Tenn.; Memphis, Tenn.; Johnson City, Tenn.

SOLVAY SALES CORP., 40 Rector St., New York City. Sou. Branches: 212 S. Tryon St., Charlotte, N. C.; H. O. Pierce, Mgr. Sou. Reprs.: Earl H. Walker, P. O. Box 2399, Greensboro, N. C.; H. W. Causey, 215 Middleton Drive, Charlotte, N. C.; M. W. Fletcher, 2973 Hardman Court, Atlanta, Ga.

SONOCO PRODUCTS CO., Hartsville, S. C.

SOUTHERN BELTING CO., 236-8 Forsyth St., S.W., Atlanta, Ga. Sou. Reprs.: A. P. Mauldin, 1376 Graham St., S.W., Atlanta, Ga.; E. G. Merritt, 549 Peachtree Battle Ave., Atlanta, Ga.; J. J. Merritt, 1428 Peachtree St., N.E., Atlanta, Ga.; J. H. Riley, 3013 Monroe St., Columbia, S. C.; S. C. Smith, 2526 Delwood Drive, N. W., Atlanta, Ga.

SOUTHERN LOOM REED MFG. CO., INC., Gaffney, S. C.

SOUTHERN SPINDLE & FLYER CO., Charlotte, N. C.

SOUTHERN STANDARD MILL SUPPLY CO., 512-514 W. Fourth St., Charlotte, N. C. Benson Davis, Mgr.

STALEY MFG. CO., A. E., Decatur, Ill. Sou. Offices, 2600 Rhodes-Haverty Bldg., Atlanta, Ga. Wm. H. Randolph, Jr., Southeastern Mgr.; L. A. Dillon, Asst. Southeastern Mgr. Sou. Reprs.: George A. Dean, H. A. Mitchell, Montgomery Bldg., Spartanburg, S. C.; W. T. O'Steen, Greenville, S. C.; H. F. Taylor, Jr., P. O. Box 1303, Charlotte, N. C.; W. N. Dulaney, 12 Montevallo Lane, Birmingham, Ala.

STANLEY WORKS, THE, New Britain, Conn. Sales Reprs.: A. Y. Bristol, 104 Maple Ave., Tel. Narberth 3795, Narberth, Pa.; G. R. Douglas, 707 Columbian Mutual Towers, Tel. 8-7117, Memphis, Tenn.; M. A. Hawkins, 3813 General Taylor St., Tel. Upton 6057-J, New Orleans, La.; H. C. Jones and W. L. Cowart, care The Stanley Sales Co., 651 Humphries St., S.W., Tel. Main 4110, Atlanta, Ga.; W. D. Low, Fox Drive, Chattanooga, Tenn.; G. J. McLernan, 209 Hubbard St., San Antonio, Tex.; C. W. Lynch, 2814 Arcadia St., Charlotte, N. C.

STEEL HEDDLE MFG. CO., Main Office and Plant, 2100 W. Allegheny Ave., Philadelphia, Pa. Greensboro Office, Guilford Bank Bldg., Box 1917, Greensboro, N. C.; C. W. Cain, Mgr.; Henry P. Godwin, Sales and Service, Greenville Office and Plant, 621 E. McBee Ave., Box 1899, Greenville, S. C.; J. J. Kaufmann, Jr., Asst. V-Pres. and Mgr. of Southern Divisions; Davis L. Batson and Sam Zimmerman, Jr., Sales and Service, Atlanta Office and Plant, 268 McDonough Blvd., Box 1496, Atlanta, Ga.; Vernon A. Graff, Mgr.; Southern Shuttles, a division of Steel Heddle Mfg. Co., 621 E. McBee Ave., Greenville, S. C.; J. J. Kaufmann, Jr., Mgr.; Louis P. Batson, Director of Sales.

STEIN, HALL & CO., INC., 285 Madison Ave., New York City. Sou. Office, Johnston Bldg., Charlotte, N. C.; Ira L. Griffin, Mgr., W. N. Kline, 2506 Roswell Ave., Charlotte, N. C.; E. D. Estes, 1257 Durand Dr., N.E., Atlanta, Ga.

STERLING RING TRAVELER CO., 101 Lindsay St., Fall River, Mass. D. J. Quillen, Sou. Mgr., P. O. Box 443, Spartanburg, S. C.; D. C. Anderson, Sou. Repr., P. O. Box 629, Cedartown, Ga.

TERRELL CO., THE, Charlotte, N. C. E. A. Terrell, Pres. and Mgr.

TEXAS CO., THE, New York, N. Y. Dist. Offices, Box 901, Norfolk, Va., and Box 1722, Atlanta, Ga. Bulk Plants and Warehouses in all principal cities. Lubrication Engineers: P. C. Bogart, Norfolk, Va.; D. L. Keys, S. Brooklyn Sta., Baltimore, Md.; W. H. Boebel, Roanoke, Va.; F. M. Edwards, Goldsboro, N. C.; W. P. Warner and R. L. Scott, Greensboro, N. C.; B. D. Heath and C. W. Meador, Charlotte, N. C.; J. S. Leonard, Greenville, S. C.; F. G. Mitchell, Charleston, S. C.; L. C. Mitchell, Atlanta, Ga.; A. C. Keiser, Jr., Atlanta, Ga.; J. G. Myers, Birmingham, Ala.; P. H. Baker, textile engineer, New York, N. Y.

TEXTILE AFRON CO., East Point, Ga.

TEXTILE SPECIALTY CO., Box 1297, Phone 2-2238, Greensboro, N. C. L. C. Atkinson, Greensboro, N. C.; F. A. Decker, 1119 Dilworth Rd., Charlotte, N. C.; John C. Turner, P. O. Box 916, Atlanta 1, Ga.; for Georgia and Alabama, Matthews Equipment Co., 93-A Broadway, Providence, R. I., for New England and Canada.

TEXWOOD MFG. & SALES CO., Greenville, S. C.

TIDE WATER ASSOCIATED OIL CO., 17 Battery Place, New York, N. Y. S. E. Dist. Office: 1122 S. Blvd., Charlotte 3, N. C.; K. M. Sigum, Dist. Mgr., Charlotte 2-3063.

U S BOBBIN & SHUTTLE CO., Lawrence, Mass. Sou. Plants, Greenville, S. C.; Johnson City, Tenn. Sou. Reprs.: E. Rowell Holt, 208 Johnston Bldg., Charlotte, N. C.; M. Ousley, P. O. Box 816, Greenville, S. C.; D. C. Ragan, High Point, N. C.; A. D. Roper, Johnson City, Tenn.

U. S. RING TRAVELER CO., 159 Aborn St., Providence, R. I. Sou. Reprs.: William W. Vaughan and Wm. H. Rose, P. O. Box 752, Greenville, S. C.; Oliver B. Land, P. O. Box 158, Athens, Ga.; Torrence L. Maynard, P. O. Box 456, Belmont, N. C.; Harold R. Fisher, P. O. Box 83, Concord, N. C.

UNIVERSAL WINDING CO., Providence, R. I. Sou. Offices, 819 Johnston Bldg., Charlotte, N. C. Agts.: I. E. Wynne and R. M. Mauldin; 903 Norris Bldg., Atlanta, Ga., Acting Agt., I. E. Wynne.

VALENTINE & CO., J. W., New York City. Sou. Rep.: T. Holt Haywood, 62 S. Main St., Winston-Salem, N. C.

VEEDER-ROOT, INC., Hartford, Conn. Sou. Office, Room 231, W. Washington St., Greenville, S. C.; Robt. W. Bailey, Sou. Sales Mgr.

VICTOR RING TRAVELER CO., Providence, R. I., with Sou. Office and Stock Room at 173 W. Franklin Ave., P. O. Box 842, Gastonia, N. C. Also W. L. Hudson, Box 1313, Columbus, Ga.

WAK INDUSTRIES, Charlotte, N. C.

WALKER MFG. CO., INC., Philadelphia, Pa. Sou. Rep.: R. T. Osteen, Sou. Mgr., 11 Perry Road, Phone Greenville 1869, Greenville, S. C.; Greenville Textile Supply Co., Greenville, S. C.; Odell Mill Supply Co., Greensboro, N. C.; A. A. ("Red") Brame, 607 Northridge St., Greensboro, N. C.; D. B. Dorman, Box 66, Station C, Atlanta, Ga.

WARWICK CHEMICAL CO., W. Warwick, R. I. Sou. Branch Factory at Rock Hill, S. C. Sou. Reprs.: M. M. McCann, Box 825, Burlington, N. C.; Henry Papini, 806 Mills Ave., Greenville, S. C.; W. E. H. Searcy, III, Box 123, Griftn, Ga.

WATER TANK SERVICE CO., Commercial Bank Bldg., Charlotte, N. C.; Republic Bank Building, Dallas, Tex.; 215 Union Ave., Memphis, Tenn.

WATSON-WILLIAMS MFG. CO., Millbury, Mass. Sou. Reprs.: W. F. Daboll, 703 Jefferson Bldg., Greensboro, N. C.; John W. Littlefield, 810 Woodside Bldg., Greenville, S. C.

WHEELER REFLECTOR CO., INC., 275 Congress St., Boston 10, Mass. Sou. Reprs.: Ernest Hall, 901-A Sul Ross St., Houston, Tex.; Marshall Whitman, Bona Allen Bldg., Atlanta, Ga.; R. T. Hardy, 1012 Garfield Ave., Palmyra, N. J.

WHITEHEAD MACHINERY CO., TROY, P. O. Box 1245, Charlotte, N. C. Phone 3-9831.

WHITIN MACHINE WORKS, Whitinsville, Mass. Sou. Office, Whitin Bldg., Charlotte, N. C.; W. H. Forcher and R. I. Dalton, Mgrs.; 1317 Healey Bldg., Atlanta, Ga. Sou. Reprs.: M. J. Bentley and B. B. Peacock; Atlanta Office, 1317 Healey Bldg.

WHITINSVILLE SPINNING RING CO., Whitinsville, Mass.

WOLF, JACQUES & CO., Passaic, N. J. Sou. Reprs.: C. R. Bruning, 302 N. Ridgeway Drive, Greensboro, N. C.; G. W. Searell, R. No. 15, Knoxville, Tenn.



MERCERIZING ASSISTANT

The Alkapens... Penetrants for Dry Mercerizing...
Wetting Agents Applied Directly in the Mercerizing
Bath... For Yarns and Piece Goods.

BURKART-SCHIER CHEMICAL CO.
CHATTANOOGA, TENNESSEE

GENERAL MILL REPAIRS

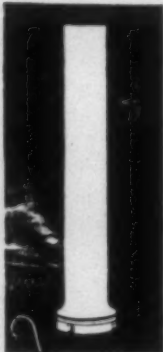
Repair Steel Rolls, Flyers and Spindles

Flutes on steel rolls raised and sized to original diameter
METHOD OF RAISING FLUTES PATENTED, NO. 1,887,510

Give Us a Trial

C. E. HONEYCUTT

GASTONIA ROLLER, FLYER & SPINDLE CO.
1337 West Second Avenue • Gastonia, North Carolina



TERMACO
for
QUALITY
and ECONOMY

CARD ROOM BOBBINS
CREEL, TWISTER, AND WARP SPOOLS
CONES - TUBES - ROLLS
SKEWERS
CLEARER BOARDS
SCAVENGER ROLLS, ETC.

The **Terrell Machine Co., Inc.**
Charlotte, N. C.

BARNES TEXTILE ASSOCIATES, Inc.

☆ CONSULTING ENGINEERS TO THE
TEXTILE INDUSTRY FOR OVER 30 YEARS

OPERATING METHODS
MECHANICAL SURVEY
COST METHODS

PRACTICAL BUDGETS
CREATIVE COUNSEL
SPECIAL PROBLEMS

10 High Street - Boston, Mass.
318 Montgomery Bldg. - Spartanburg, S. C.

ROY CARD GRINDERS

Improvement in carding is
produced immediately by
ROY CARD GRINDERS.
This means increased
efficiency and quality in
subsequent processes,
through spinning.

ROY GRINDERS
Cotton Card—Woolen and
Worsted Napper Roll—
Calender Roll.

B-S-ROY & SON COMPANY
WORCESTER, MASS.
GREENVILLE, S. C.

Jarrett's
TRADE MARK

SANITARY CHEMICALS

Cleaners, Disinfectant, Deodorant Blocks, Deo-
dorant Block Holders, Insecticides, Soaps, Soap
Dispensers, Self-Polishing Waxes, Bowl Cleaner,
All Kinds Special Cleaners and Soaps.

HEAVY CHEMICALS

Soda Ash, Caustic Soda, Liquid Chlorine,
Calcium Chloride, Sodium Bicarbonate, Salt.

SUPPLIES

Mop Buckets and Wringers, Mop Sticks, Mop
Heads, Brooms, Garbage Cans.

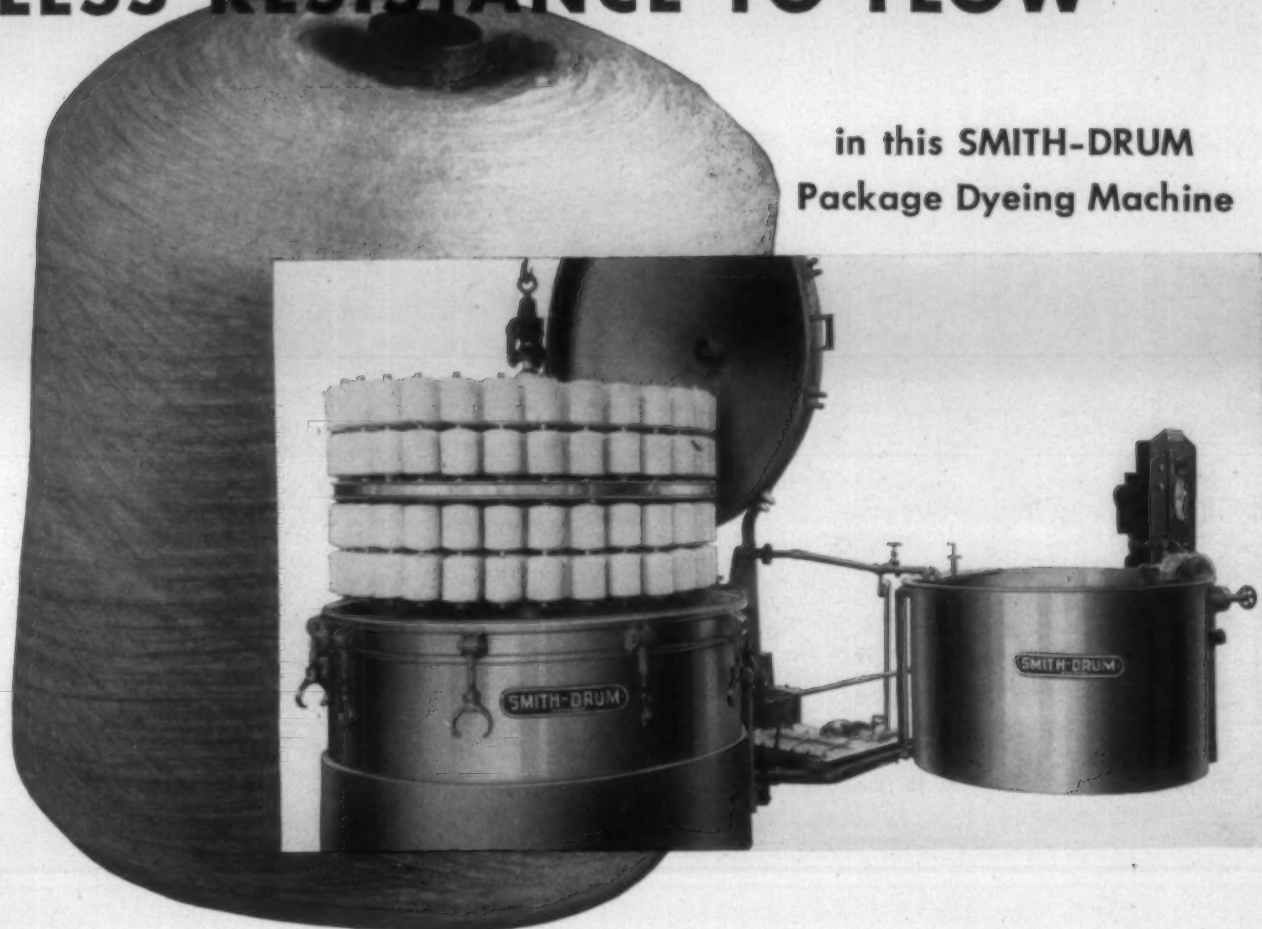
Your inquiries will be appreciated

CECIL H. JARRETT & CO.

P. O. Box 647 NEWTON, N. C. Phone 154

LESS RESISTANCE TO FLOW

in this SMITH-DRUM
Package Dyeing Machine



Increases volume of liquor through each package by 276%

Smith-Drum engineers were the first to recognize that the larger the volume of dye liquor moved through a package of yarn and the lower the pressure developed . . . the faster and more uniform would be the dyeing results. This new principle was developed, for the first time in package dyeing, in the Smith-Drum Package Dyeing Machine introduced a few years ago. An entirely new type of package carrier and a radical departure in spindle design reduced resistance to flow and resulted in 276% greater flow of liquor than permitted by the conventional types of package dyeing machines. Obviously, dyeing efficiency was tremendously increased.

Other advancements incorporated in this

Smith-Drum machine included a visual control panel, a patented backwash feature and an automatic reversing valve. Every one of these features are now generally considered essential for satisfactory package dyeing . . . and each was a Smith-Drum "first"! These 5 major advantages promptly won first place in sales.

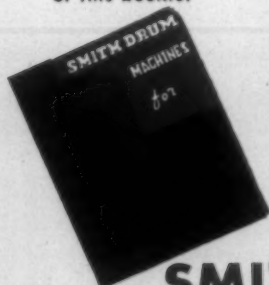
New improvements in the Smith-Drum Package Dyeing Machine are now being perfected and will be incorporated in our post-war models. These new features will keep Smith-Drum way out ahead in both performance and sales. We suggest that you place your orders now, to avoid a long wait for delivery when war restrictions are lifted.

SMITH, DRUM & COMPANY, Allegheny Ave. at 5th Street, Philadelphia 33, Pa.

SMITH-DRUM Textile Machines

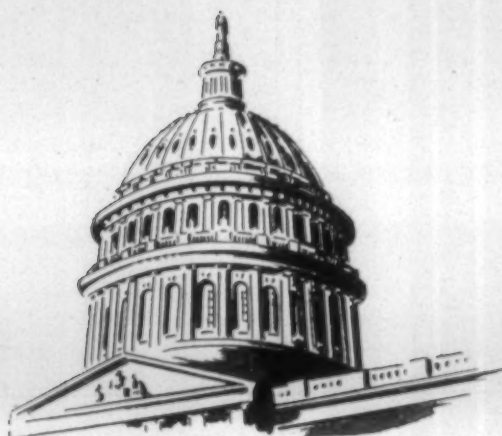
for hosiery dyeing, skein dyeing, package dyeing, beam dyeing, piece goods dyeing, package drying, skein mercerizing, warp mercerizing, hosiery inspection.

Write for copy
of this booklet



WATCHING WASHINGTON

[Exclusive and Timely News from the Nation's Capital]



INTENSE PRESSURE IS BEING PUT ON CONGRESS to provide more adequate means for settling industrial disputes and avoiding labor strife. Some such action can be expected in early 1946. Both the Administration and Congress are of the belief that the way to make strikes unnecessary is to provide legal machinery for handling disputes that gives management and labor the assurance of a just settlement of differences by peaceful means. Just now this seems to mean a machinery of collective bargaining, aided by government mediation, voluntary arbitration and public fact finding.

Break between CIO President Murray and the Administration should not be taken too seriously. President Truman says he hasn't read about it; he thus leaves the door open for Murray to come back, which he probably will, since he has no where else to go. Murray's outburst was a show of pique. CIO is essentially a child of political expediency, born to offset AFL's dislike of Madame Perkins as Secretary of Labor. A permanent break, or even an unfriendly Administration, would probably spell CIO's demise. Murray knows this, and so does the President.

The Hobbs anti-racketeering bill, aimed at union abuses and extortion, is again passed by the House and sent to the Senate. This time the chances are excellent it will go through the Senate, and it will not be vetoed by the President. The Administration green light was given to the bill with the break-up of the Labor-Management Conference. The bill makes it a felony to interfere with interstate commerce movement by "robbery or extortion," meaning enforced union membership on drivers of trucks carrying goods across the various state lines.

Unemployment compensation payments are moving upward, with a rise to a new post-war high of 1,800,000 in the week of Dec. 1; an increase of 141,500 from the previous week. Only two states, Illinois and Massachusetts, fail to show an upward trend. Increase is attributed to workers made idle in plants not party to strikes, but caught in work stoppages of suppliers and buyers.

Reduction in taxes under the new revenue act gives taxpayers a possible opportunity to cut down burdens on income of 1945 and following years. As a general rule, taxpayers may defer income to 1946 and crowd deductions into 1945. Saving occurs where deferment does not put the taxpayer into a higher bracket, with higher taxes in 1946. Savings are possible in accelerated payment of bills, taxes, interest, gifts and payments of bonuses. Losses can be taken in 1945 as an offset to gains or to provide a carry-over against net capital gains or net income of the five succeeding years.

Delay in easing or removing OPA controls is caused by the uneasiness of Administrator Bowles over the strike situation and its

effect on reconversion. A new procedure called "interim policy on suspension or removal of controls" has been set up. Reason given for the policy, which retains controls intact, is that "further expansion of de-control policy must be delayed because of continued shortage of materials and failure of labor to man industries considered vital to the civilian economy."

Many signs point to an overhauling and complete revision of OPA's policies with the turn of the year. This is to beat Congress to the gun. A thorough, sweeping investigation is slowly gathering force in the House, based on growing dislike of new formulas and growing complaints of hardships caused by arbitrary administrative action. How far down the revision will go is uncertain, but continuation of the present flood of complaints in an election year can culminate in only one thing---far-reaching investigation.

There's no comfort for domestic wool producers in the national wool situation. Mill consumption has declined sharply in the last six months of the year, due to cancellation of military contracts. Wool that is being consuming is coming increasingly from foreign sources, due to 43 cent price spread that has prevailed until lately between domestic and foreign wools. Only 30 per cent of wool consumed in American mills in first eight months of 1945 was of domestic origin. Commodity Credit Corp. has reduced selling price seven cents a pound in effort to promote an increase. Outlook in first part of 1946 favors slow but steady increase.

Extension of the War Powers Act is headed for spirited controversy between the House and Senate. House wants six-month extension, and Senate insists on one-year extension. Unless agreement is reached before Dec. 31, the law will expire by limitation. Administration prefers extension for one year.

Payroll tax of three to five per cent will be required to finance the compulsory national health insurance program, it is admitted by Representative Dingell, one of the bill's sponsors. He will press for passage of the bill first, he says, and then sponsor a payroll tax bill to raise funds to put it into execution. He contends corporations now have the greatest financial strength in their history, due to accumulating unprecedented reserves during the war, and available through carry-back and carry-forward provisions of revenue laws. Employers are in a strong position to assume the tax, he contends.

Version of the "full employment" bill adopted by the House throws overboard the original CIO inspired bill, contemplating 60,000,000 made jobs. Under new bill government will undertake to encourage high levels of employment, and facilitate economic activity as offset for foreshadowed business recession, but is silent on implied obligation that Uncle Sam owes every man a job. House action in rejecting the original bill is the sharpest set-back that labor demands on Congress have met in this session.

Housing shortage and soaring costs of construction are the biggest single headache of the Administration as the year ends. It's estimated that two-thirds of the nation's farm families are not adequately housed, and condition in urban and industrial centers is a problem of the first magnitude. Time is near when the government must make long-range decision whether to adhere to ideal of individually owned homes, or go in on large scale government construction, financing and control. High wage costs in construction, rather than existing shortages in building materials, is held to be the largest single factor to be solved in disposing of the problem.

First class postage for local delivery would be reduced to two cents from the present three cents under a bill favorably reported to the House.



A-P-T

TUBES • QUILLS
AND BOBBINS

Engineered LIKE A SPEEDBOAT

A speed boat didn't "get that way" accidentally. It was "engineered" for the job; both the hull and the engine were designed for a specific purpose — SPEED.

Likewise with A. P. T. Yarn Carriers; they are made of laminated paper, treated for water repellency, hardened by baking and molded with plastic with a specific purpose in mind — to permit faster spindle speeds with less vibration and wear, fewer stops and less yarn damage.

These and many other advantages are due to the following features:

- 1 No splinters, chipping or splitting, giving greater yarn protection.
- 2 No distortion from steaming or similar causes.
- 3 Free but controlled delivery due to hard, smooth surface and deep, well rounded corrugations.
- 4 Great resiliency. Even if bent by abusive handling, they will usually straighten out on the spindle.
- 5 No slippage on spindle. Perfect cling.
- 6 Perfect balance because the barrel is always concentric with the hole. Reduces vibration.
- 7 Saving in power in some cases.
- 8 Great strength in view of light weight, resulting in long life.
- 9 No static, making for operating economy.
- 10 Larger capacity in some cases.
- 11 Ultimate low cost because of savings they effect.

Find out what A. P. T. Yarn Carriers can do for you.

Photo by Ewing Galloway

AMERICAN PAPER TUBE COMPANY

ESTABLISHED 1898 • • • WOONSOCKET, RHODE ISLAND

SALES REPRESENTATIVES: JESSE HODGES, P. O. BOX 784, CHARLOTTE, N. C. • JAMES L. COFFIELD, JR.,
360 NORTH MICHIGAN AVE., CHICAGO, ILL. • W. J. WESTAWAY CO., LTD., HAMILTON, ONT., CANADA

*Lightning
strikes
Twice*

First IMPREGNOLE . . . and now

Durable **Norane**

- ✓ Laboratory Certified for **WATER-REPELLENCY**
- ✓ Laboratory Certified for **DURABILITY**

NORANE has already won an enthusiastic consumer acceptance that reflects the eminence of its famous companion-product, IMPREGNOLE. War has been NORANE'S critical proving ground, but despite limited civilian use, it has received national recognition as a superior durable water-repellent. Where more dependable durable water-repellency is needed, it is not too early to investigate the NORANE quality story.



WARWICK CHEMICAL CO.

West Warwick, Rhode Island

380 FIFTH AVENUE, NEW YORK 19, N. Y.

ROCK HILL, S. C.

ADVE
INDEX